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UNIVERSITY OF ALBERTA

AN EXPLORATION OF THE MEANING OF HOPE IN HEALTH AND ILLNESS

BY

© CHERYL LYNN MARIE NEKOLAICHUK

A THESIS SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND
RESEARCH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF DOCTOR OF PHILOSOPHY

IN

COUNSELLING PSYCHOLOGY
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

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'The sun sets;
mountains fade into the darkness;
the bird's note is stilled.'

- Taras Shevchenko

In memory of my mother,
Katherine Marie Nekolaichuk,
who cultivated my prairie spirit and my ethnic roots,
the essence of my hope.

ABSTRACT

Despite an emerging empirical interest in the role of hope in illness, health care researchers continue to struggle with the elusive nature of this complex, multidimensional construct. This study was designed to explore the meaning of hope in health and illness in two separate phases. The purpose of the first phase was to identify a structure of hope, based on personal or connotative meaning. The purpose of the second phase was to compare differences in the meaning of hope, amongst individuals with varying health and illness experiences.

To assist in this exploration, a research tool, based on the semantic differential technique, was developed. The semantic differential technique is a well-validated and often used approach for quantifying connotative meaning using continuums of adjective pairs. This tool was initially pilot tested for clarity and readability. It was distributed in the form of a questionnaire to a voluntary sample (n=550), consisting of three primary subsamples: a healthy adult subsample (n=146); a chronic and life-threatening illness subsample (n=159); and a nursing subsample (n=206).

In response to the first phase of this study, a multidimensional structure for the concept, *Hope,* was identified, using factor analytic procedures. Three factors defined this structure, specifically, *personal spirit, risk* and *authentic caring*. *Personal spirit* was a predominant factor, characterized by a holistic configuration of hope elements, revolving around a core theme of *meaning*. The *personal spirit* factor was interconnected with the other two *Hope* factors of *risk* and *authentic caring*. The variability of this structure was examined across other hope-related concepts. In response to the second phase, a further analysis of the data, including between- and within-group comparisons, was performed. Implications for further research and clinical applications within the context of chronic and life-threatening illnesses were proposed.

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The process of doing research can be a long and lonely journey. My journey was enriched, and my hope strengthened, by the many people who cared and shared so freely of their time and expertise:

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CHAPTER ONE

INTRODUCTION

Statement of the Problem

What does 'hope' mean to you? Although hope is a commonly used term in every day life, the answer eludes many people. Some casually reply that they have never given much thought to the word. Others attempt to describe how their meaning of hope changed, when confronted with challenging life events. Many have difficulty expressing their thoughts in words. Rather, they speak about hope from personal experience, recounting an image or a story that has special meaning. The nature of these experiences shape their responses to this puzzling question.

Within the experience of illness, this same question, "*What does 'hope' mean to you?*," elicits a diversity of responses. Some envision hope as *a life and healing force*, raising it to an enviable position of ultimate power. Others see hope as *a false or unrealistic belief*, quickly displacing it to a devalued position of futility. Still others speak of hope in terms of *a moment* or *a thread*, acknowledging its fragile and fleeting nature. Many describe the experience of hope as an inner struggle - a struggle between *being too hopeful* and *not being hopeful enough* - as they strive to master this fragile force.

Despite its tenuous nature, hope is the essential thread that connects the world of the patient with that of the health care system. The thread of hope is woven into the fabric of each person's illness experience. For some, the threads are tightly woven, while for others there are ravelling strands. Although each person's pattern of weaving is unique, hope, itself, transcends individual experience. It creates a meaningful connection between the patient and the professional caregiver. This transcendent quality captures the essence of hope: Hope is a shared experience.

If hope is a shared experience, as many have suggested, then it raises an important follow-up question to the meaning of hope in illness: "Within any patient-caregiver relationship, how does one person's meaning of hope influence the other?" Patients often speak of a "confidence connection" or a trust that they place in caregivers, directing all of their hopes towards a cure. However, what does hope mean to those patients, with chronic or life-threatening illnesses, for whom a cure is not always possible? Of equal importance, what does hope mean to the caregivers, in whom these patients have placed all of their trust?

These questions about the personal meaning of hope amongst patients and caregivers resonated throughout my clinical internship in a cancer setting. I was fascinated by the contrasting responses that these questions evoked. I vividly recall one patient's image of hope as "life in the desert." For this patient, the desert was teaming with life, in spite of its sparseness. Although it was difficult to sustain life in the desert, the plants that grew there were flourishing. A professional caregiver's meaning of hope stood out in sharp contrast. From this person's point of view, hope was embedded within a statistical framework. People who outlived their prognoses were the fortunate few who happened to fall in the upper end of a probability curve. Within this framework, the primary goal was to help patients deal with their illnesses by telling them the "truth." Not only was I struck by the contrast, I was also aware of how these vastly different responses held significant personal meaning for these two individuals.

As I became more sensitive to differences in the personal meaning of hope, I also became aware of individual differences in valuing hope. Generally, hope is positively valued in health care. Most practitioners would agree that hope plays an important role in helping individuals cope with illness. However, not everyone views hope in the same way all the time. I was particularly moved by a patient, who was upset with the medical staff for "forcing hope" on her. She saw little quality in her life and wanted to die, yet everyone was denying her this option. It was only when she was given the freedom to choose that she embraced hope herself, shifting from a state of despairing to living. This particular encounter heightened my awareness of the differences in the value of hope amongst people, which may fluctuate over time.

In spite of these apparent differences in the clinical setting, the essence of the personal meaning and value of hope is lost in the literature. A diversity of definitions and frameworks have been generated in an effort to depict the definitive model of hope. Most of these models focus on the common elements of hope, as opposed to the uniqueness of experience. Further, the use of abstract concepts and confusing terminology obscure the personal experience from which some of these models have been derived. In spite of these efforts, a universally accepted model or definition of hope does not exist.

Not only is the personal meaning of hope lost in the literature, there is a limited perspective on the view of hope in illness. Most models, which have been derived inductively, are based on the patient's perspective of hope. Few studies have focused on the experiences of caregivers or healthy individuals. Given the uniqueness of experience, the question arises as to whether or not patient-derived models are generalizable to professional caregivers and healthy individuals.

Three questions emerged from this disparity between clinical experience and the hope literature. First, given the uniqueness of personal experience, is it possible or realistic to develop an encompassing, universal model of hope? Second, could a model be developed that captures the uniqueness and dynamic nature of human experience? Third, if such a model could be developed, then how might it be used to explore the personal meaning of hope amongst different individuals? These questions became the driving force for the study that follows.

Purpose of the Study

The purpose of this study was to explore the meaning of hope in health and illness. This exploration was divided into two phases, representing a theoretical and clinical orientation, respectively. From a theoretical perspective, the purpose of the first phase was to identify a structure of hope based on personal experience or meaning. Once this structure was identified, an underlying goal was to compare this structure with existing theoretical frameworks. From a clinical perspective, the purpose of the second phase was to compare the meaning of hope amongst individuals with different health and illness experiences. Three groups were identified for this comparison, specifically, a group of healthy individuals, a group of individuals with illness experiences and a group of health care providers.

Two primary questions framed the research study:

1. What is the structure of hope based on personal meaning?
2. Are there differences in the meaning of hope amongst individuals with different health and illness experiences?

Theoretical Framework

To identify a structure of hope that captures personal experience, the theoretical framework of the semantic differential (Osgood, Suci & Tannenbaum, 1957) was selected. Osgood and his associates developed the semantic differential technique for quantifying connotative meaning. Connotative meaning is the personal meaning that individuals attribute to words, symbols or other stimuli. Osgood et al. contrasted connotative meaning with denotative meaning, which is the referent or universal meaning assigned to words. Connotative meaning emphasizes the uniqueness, while denotative meaning reflects the commonality, of experience.

To build on the existing hope literature, the multidimensional model of hope proposed by Dufault and Martocchio (1985) was also selected. Within this multidimensional framework, Dufault and Martocchio conceptualized hope as consisting of two spheres, a generalized hope sphere and a particularized hope sphere. These two spheres share six common dimensions, specifically, the affective, cognitive, behavioral, affiliative, temporal and contextual dimensions of hope. This model was qualitatively derived from the personal experiences of elderly cancer and terminally ill patients. Although it is one of the most commonly referenced models in the literature, it has not undergone extensive validation, particularly outside the context of illness.

Significance of the Study

This study will enhance our understanding of the meaning of hope in health and illness, from both a theoretical and clinical perspective. Theoretically, it will contribute to the further development of hope models which emphasize the dynamic and unique experience of hope. The selection of a diverse sample extends hope research beyond the illness experience to include the context of health, as well as the perspectives of health care providers. As most health care research has focused on the illness population, the results from this study may help either validate or reject existing models of hope. Clinically, within the context of illness, the enhanced understanding of an individual's personal meaning of hope will contribute to a more effective patient-caregiver relationship. Personally meaningful hope-enhancing strategies could be developed for both patients and health care professionals. A further application would be to chart a person's perspective of hope over time, capturing the dynamic nature of this construct.

Definitions of Concepts

Three concepts, relating to health, illness and health care, require further elaboration. These three concepts may be defined in terms of the three populations of interest that were identified for this study: *a healthy adult population, an illness population* and *a health care provider population.* These three populations were defined by the following specific criteria.

The *healthy adult population* is defined by two criteria, health status and illness experience. *Healthy adults* are those individuals, 18 years of age or older, who rate their current level of health as either *good, very good* or *excellent.* In addition, these individuals have not experienced a chronic, serious or life-threatening illness.

The *illness population* is based on illness experience, regardless of health status. *Individuals with an illness experience* are those individuals who have experienced a chronic, serious or life-threatening illness at some point in their lives. The health status of these individuals could range from *excellent to poor,* as reported by the participants. These individuals could be at different phases in the illness experience, ranging from newly diagnosed to end-stage disease. Some individuals may be in remission, while others may have completely recovered from the experience.

The *health care provider population* includes those individuals who are working professionally with patients within the health care system. For the purposes of this study, health care providers are limited to the nursing profession. A cross-section of training experiences is represented, ranging from student to practising nurses. *Student nurses* are limited to students who are enrolled in either their second or fourth year of nursing training. *Practising nurses* are limited to nurses with a minimum level of training as a registered or psychiatric nurse, who are actively working either full- or part-time in a clinical setting. The clinical positions of these nurses may include staff nurses, nursing supervisors, nursing managers and clinical instructors. These nurses represent a diversity of clinical experiences in both hospital and community settings.

Summary

We learn most about the personal meaning of hope from our clinical experiences and relationships. Yet, when we try to share these learnings in the literature, this personal meaning is lost in the theoretical abstraction of this construct. This gap between the clinical experience and the theoretical expression of hope creates an artificial dichotomy. Clinicians and researchers oscillate between the clinical and theoretical realms of hope, in an effort to find a personal point of equilibrium. This study bridges these two realms, by integrating the personal experience of hope within the theoretical mapping of a hope structure. It has the potential to contribute, both clinically and theoretically, to the further development of this complex, elusive construct.

CHAPTER TWO

LITERATURE REVIEW

The disparity between clinical experience and theoretical models of hope raises two important questions, that require further elaboration. First, "What is the therapeutic value of hope in illness?" Second, "What are some of the challenges confronting hope researchers?" These two questions provide a framework for the literature review that follows.

The Therapeutic Value of Hope in Illness

Why are researchers focusing on hope within the context of illness? Clinical observations and empirical findings, linking hope, health and illness, have contributed to an emerging interest in this research area. These observations and findings revolve around three specific perspectives: the link between hope and healing; hope and coping; and hope and the health care provider's role.

The first perspective, *the link between hope and healing*, may be traced to early clinical observations of hope as a life-promoting force (Lynch, 1974; Marcel, 1962; Vaillot, 1970). Stemming from these early observations, some have suggested that hope enriches quality of life experiences (Stoner & Keampfer, 1985; Stotland, 1969). Others have extended this life-promoting quality of hope to the area of illness, with suggestions that hope and health are positively related (Lange, 1978; Obayuwana & Carter, 1982; Proulx, 1972). The presence of hope may have a powerful influence upon the healing process (Bruhn, 1984; Frank, 1975; Gottschalk, 1985); while a loss of hope can have a profound negative impact on psychological well-being, response to therapy and recovery from illness (Cousins, 1989; Engel, 1968; Frank, 1975; Lange, 1978). Given this link between hope and healing, one might then question, "What is the role of hope in chronic or life-threatening illness, where complete healing or a cure may not be probable?"

Within the context of chronic or life-threatening illness, *hope is linked to coping,* which is the second perspective contributing to research in this area. Hope has been described as a central theme within the process of effective coping (Forsyth, Delaney & Gresham, 1984); as a prerequisite to coping (Herth, 1989); as an adaptive task (Craig & Edwards, 1983) or coping strategy (Jalowiec & Powers, 1981); and as a separate, yet interconnected process that exists concurrently with coping (Nekolaichuk, 1990). Although the nature of the relationship between hope and coping remains unclear, these differing viewpoints are connected by a unifying underlying theme, that is, hope facilitates coping. Thus, individuals with chronic or life-threatening illnesses are challenged with the task of maintaining hope throughout the illness process.

The individual's challenge of maintaining hope is intertwined with the third perspective, *the link between hope and the health care provider's role.* Hope has an inherent relational quality, that is, a person experiences hope in relationship to something or someone (Jevne, 1993). Thus, within the health care setting, caregivers potentially play a significant role in influencing patients' hope. Instilling or enhancing hope in patients is a preferred and desired role of health care professionals, within nursing (Hickey, 1986; Miller, 1985; Nowotny, 1991; Owen, 1989) and medicine (Delvecchio Good, Good, Schaffer & Lind, 1990; Jevne, 1993; Menninger, 1959).

In a review of empirical studies on hope in illness (Nekolaichuk, 1992), seven basic assumptions about hope, common to most studies, were identified:

- Hope is essential to life.
- Hope enhances quality of life.
- Hope is positively related to health.
- Hope may help promote healing.
- Hope helps individuals cope with the illness experience.

- Hope is a shared experience. Therefore, health care professionals have an important role to play in enhancing hope in patients.
- Hope is a recognizable construct which can be described through verbal expression and common terminology.

One additional assumption, which was common to some but not all studies, was that hope is a measurable construct.

These assumptions are skewed towards the positive value of hope in illness. Critics of the hope research field argue that hope may not always be valued within illness, particularly citing the potentially destructive nature of *false hope*. Clinically, some patients have expressed their anger toward hope, when they have built up their hopes, only to have them shattered. These observations raise the question: "Are there differences in the way that people perceive and, therefore, value hope, based on their personal experiences?" This study has been designed to explore these potential differences, within the context of health and illness.

The Challenges of Researching Hope

The three perspectives, linking hope, health and illness, provide a solid foundation for researching hope. In spite of this foundation, however, there has, historically, been a reluctance to research this intangible, complex construct. Menninger (1959) aptly described this neglect by the scientific community to study hope, in comparison with other virtues such as faith or love.

> Our shelves hold many books now on the place of *faith* in science and psychiatry, and on the vicissitudes on man's efforts to *love* and be loved. But when it comes to hope, our shelves are bare. The journals are silent. The *Encyclopedia Britannica* devotes many columns to the topic of love, and many more to faith. But hope, poor little hope! She is not even listed. (pp. 447-448)

More recently, there has been a growing interest in researching hope. However, the ability to research the hope construct presents a series of challenges to the investigator. The following challenges were considered within the design of this study: the complex, multidimensional nature of hope; the distinctive feature of hope, as being a shared experience; and the selection of an appropriate research method.

Hope as a Complex Construct

Hope is a complex, multidimensional construct which continues to elude researchers. An emerging interest in hope within health care has resulted in an increase in empirical studies, which has helped stimulate new thought and research directions. Interwoven throughout the research field, however, is a common thread of concern regarding the lack of a unifying hope framework. Researchers continue to struggle with the elucidation of a cohesive and comprehensive hope model.

The elusive nature of hope is reflected in the diversity of current conceptual frameworks. A variety of perspectives are being integrated within research designs, varying from unidimensional models, such as that initially proposed by Stotland (1969), to more recent, complex, multidimensional frameworks (Dufault & Martocchio, 1985; Hinds, 1984; Obayuwana & Carter, 1982; Owen, 1989). Others have adopted a linear view of hope, placing hope on a continuum, ranging from extreme hopefulness to extreme hopelessness (McGee, 1984). The multidimensional frameworks are more comprehensive than the linear, unidimensional models, but they lack an integration of perspectives.

This diversity in conceptual frameworks is not without its inherent problems. The adoption of simplistic models of hope may result in incomplete findings. Further, the use of differing conceptual frameworks introduces confusing terminology, as well as hinders the generalizability of findings through cross-study comparisons. The lack of empirical validation and the derivation from small, specific samples further limit current frameworks. Theoretically derived models such as Stotland's (1969) or McGee's (1984) have not been empirically validated. When models are empirically derived, they are often based on specific samples such as elderly cancer and terminally ill patients (Dufault & Martocchio, 1985) or healthy and ill adolescents (Hinds, 1984; Hinds & Martin, 1988). Further study is required to validate these models and extend research beyond the patient's perspective.

Of the existing conceptual frameworks, Dufault and Martocchio's (1985) multidimensional model of hope is the most comprehensive to date. Within this model, hope is conceptualized as consisting of two spheres, generalized and particularized hope. These two spheres share six common dimensions, specifically affective, cognitive, behavioral, affiliative, temporal and contextual. This model was empirically derived from a sample of 35 elderly cancer patients (Dufault, 1981) and then validated with a second sample of 47 terminally ill individuals (Martocchio, 1982). Not only did it advance a multidimensional perspective of hope, it also challenged the contrasting, linear view of hope proposed by McGee (1984).

Although Dufault and Martocchio's (1985) model has helped advance the conceptualization of hope, there are some limitations to this model. Its complex nature, as well as the use of confusing terminology, may discourage researchers. Further, the derivation from a limited sample raises the question of whether or not this model is generalizable to other populations. To enhance its usefulness, further validation is required, a need which is supported in the literature (Herth, 1990). In spite of these limitations, Dufault and Martocchio's model has been selected as an initial hope framework for this study. This model will be integrated within the study design, which will help in validating or possibly modifying this original work.

Hope as a Shared Experience

The view of hope as a shared experience is a distinctive feature of the construct. There are numerous accounts in the literature of this interconnected quality of hope. These include Lynch's (1974) concept of "mutuality," Dufault and Martocchio's (1985) inclusion of an affiliative dimension in their hope model and Perakyla's (1991) description of an interactional process of "hope work," occurring between patients and their caregivers. Further empirical support is provided by patients who identified "relationships with caregivers" (Miller, 1989) and "interpersonal connectedness" (Herth, 1990) as hope-inspiring strategies.

The interconnected nature of hope is clinically acknowledged within the health care setting. The significance of the caregiver's role in instilling hope is well-documented by nursing (Hickey, 1986; Miller, 1985, 1991) and, to a lesser extent, by medicine. In a study of 51 oncology physicians (Delvecchio Good et al., 1990), the instillation of hope in patients was identified as a critical dimension of the oncologist's care. Although the instillation of hope is a preferred role, health care professionals are in a precarious position of either enhancing or diminishing hope in patients. The precariousness of this position is influenced by the power which is often bestowed upon health care professionals, as well as their own beliefs about hope (Jevne, 1991, 1993).

Although the involvement of caregivers within the patient's experience of hope is clinically supported, there is minimal empirical research which focuses directly on the caregiver's perspective. Most studies have focused on the patient's perspective of hope (Hinds & Martin, 1988; Miller, 1989; Owen, 1989). In a recent review of the hope literature (Nekolaichuk, 1992), only three studies involving caregivers were identified (Delvecchio Good et al., 1990; Owen, 1989; Perakyla, 1991). In one of these studies, even though a caregiver sample was used, the research focused on the patient, by obtaining the nurses' perspectives on the meaning of hope in cancer patients (Owen, 1989).

To date, most studies have focused on the patient's perspective of hope, often within health care settings. A recurrent theme within this research is the significance of interpersonal relationships, particularly with caregivers. If hope is a shared experience, as many have suggested, then one might ask the following questions: (a) "What is the meaning of hope from the caregiver's perspective?" and (b) "Are there differences in the meaning of hope between patients and health care providers?" To help answer these questions, the sample for this study includes both patients and health care providers.

Selection of a Research Method

Traditionally, the study of hope has followed two distinct paths of inquiry, guided by the selection of a research method from either the quantitative or qualitative paradigm. Research in either paradigm is concerned with clarifying the construct, but with different focal points. Quantitative research studies have primarily focused on measurement, in an attempt to quantify the construct. In contrast, qualitative research studies have primarily focused on individual perspectives and experiences, in an attempt to further understand the nature of this construct.

Within the quantitative paradigm, researchers have focused on quantifying the concept of hope through the development and refinement of instruments (Herth, 1991, 1992; Miller & Powers, 1988; Nowotny, 1989; Plummer, 1988: Stoner & Keampfer, 1985). Subsequently, these tools are being used in outcome, prediction and correlational research (Farran, Salloway & Clark, 1990; Foote, Piazza, Holcombe, Paul & Daffin, 1990; Herth, 1989; McGill & Paul, 1993; O'Malley & Menke, 1988). The movement towards quantifying the hope construct is still in the early phase of development. Current instruments are based on differing conceptual frameworks, potentially impairing cross-study comparisons. Further, the initial testing of some of the instruments on specific, convenience samples substantiates the need for further validation with more varied populations. For a more detailed review, Farran, Herth and Popovich (1995) provide a comprehensive and current critique of existing hope measures. In this critique, they reinforce the need for further development of psychometrically sound hope instruments.

Within the qualitative paradigm, studies have focused on gaining clarity of the hope construct, by exploring the meaning (Dufault & Martocchio, 1985; Hall, 1990; Herth, 1990, 1993; Hinds, 1984, 1988; Owen, 1989) and lived experience of hope (Parse, 1990; Stanley, 1978); elucidating its process-oriented nature (Hinds & Martin, 1988; Ersek, 1992); and identifying hope-enhancing strategies (Herth, 1990, 1993; Miller, 1989). When focusing on the meaning of hope, researchers have traditionally used qualitative methods, including grounded theory (Hinds, 1984, 1988; Owen, 1989), content analysis of semi-structured interviews (Hall, 1990; Herth, 1990, 1993) and participant observation (Dufault & Martocchio, 1985). These methods were used to explore the meaning of hope in adolescents (Hinds, 1984, 1988), the terminally ill (Hall, 1990; Herth, 1990), the elderly (Herth, 1993) and cancer patients (Owen, 1989). To date, a quantitative method has not been used to explore the qualitative experience or personal meaning of hope.

Unlike previous research, this study was designed to explore the meaning of hope, using a reliable and well-validated quantitative method, the semantic differential. The semantic differential technique, initially developed by Osgood and his associates (1957), is a method for measuring connotative meaning. *Connotative meaning* refers to the meaning that individuals attribute to any stimulus, be it a word, a story or an image, based on subjective experience. This personal meaning that individuals attach to words or concepts differs from denotative meaning. *Denotative meaning* signifies the abstract, objective, universally defined attributes of any stimulus. For example, the denotative meaning for the word, apple, may include descriptions such as a red- or yellow-skinned fruit with white pulp. In contrast, the connotative meaning for the word, apple, would be based on a person's experience: if a person bites into a rotten apple, then the connotative meaning may involve descriptions such as unpleasant, distasteful and upsetting.

The semantic differential technique can be used to measure the meaning of a multidimensional construct, like hope. Concepts related to the domain of interest are rated against continuums of adjective pairs, which are polar or opposite in nature. Each continuum of adjective pairs forms a scale. This scale provides a set of alternative responses, ranging from the extreme of one adjective to the extreme of the other. The quality and intensity of meaning, which the individual places on the concept, can be determined by the direction and distance of these responses for a set of scales.

This technique offers some advantages over other commonly used methods of measurement. The semantic differential differs from instruments which produce scores along a single continuum by being able to represent multiple dimensions. Further, a minimal amount of time is required to access a large amount of data and a variety of approaches may be implemented for data analysis. Within the research field of hope, the semantic differential offers a novel approach for quantifying the personal meaning of hope.

There are three common factors associated with the semantic differential model: *evaluation, potency and activity* (Osgood et al., 1957). These factors represent the space which is typically used to describe the meaning of a specific domain. The *evaluative factor* is a form of assessment or evaluation, that may be characterized by an evaluative adjective pair such as *good-bad.* The *potency factor* represents the relative strength or roughness of a concept. It may be represented along an adjective pair continuum such as *strong-weak.* The *activity factor* is an indication of the degree of movement of a concept, represented along an activity continuum such as *active-passive.* These three dimensions tend to comprise the major portion of the variance among the semantic differential scales.

Some parallels can be drawn between the three common factors associated with the semantic differential and research within the hope field. Most hope research studies have adopted an underlying assumption that people positively value hope. The *evaluative factor* of the semantic differential may help identify potential differences in the value of hope amongst individuals. To date, there has been no research to address this issue. Both the *potency factor* and the *activity factor* of the semantic differential may be related to the concept of energy, which has emerged as a common theme linking different elements of hope (Owen, 1989). From a hope perspective, the *potency* factor may represent the level of energy, while the activity factor may represent the movement of energy. The *activity factor*, itself, is similar to the action-oriented nature of hope, which Dufault and Martocchio (1985) isolated as a behavioral dimension within their hope model.

Two kinds of uses have been developed for the semantic differential technique (Maguire, 1973). The first is to use the semantic differential as an instrument of measurement, that is, to measure the connotative meaning of established concepts. The second involves the use of the semantic differential as an instrument of exploration, to aid in the structuring of domains. The original factor analysis of meaning by Osgood and his associates (Osgood & Suci, 1955; Osgood et al., 1957) involved the use of the semantic differential in the exploratory mode. Although this original work was initiated by Osgood and Suci (1955), it was expanded to include a team of researchers (Osgood et al., 1957; Snider & Osgood, 1969). Throughout this paper, reference will be made to Osgood and his colleagues' work. At times, this team effort will be explicit, while at others times, it will be implied. More recently, the exploratory use of the semantic differential has been applied to the domain of attitudes (Bowles, 1986; Flagler, 1989). For this study, the semantic differential technique was used in the exploratory mode to structure the dimensions of hope.

Summary

Clinical support for conducting research in the area of hope is well documented. However, questions regarding individual differences in the personal meaning and value of hope remain unanswered. Further, the complexity of the hope construct challenges researchers who wish to validate clinical findings. The lack of a universal conceptual framework, the view of hope as a shared experience and the limitations of research methods impede the researcher's progress. These same obstacles, however, have acted as catalysts for the inspiration and design of this study.

CHAPTER THREE

RESEARCH METHOD

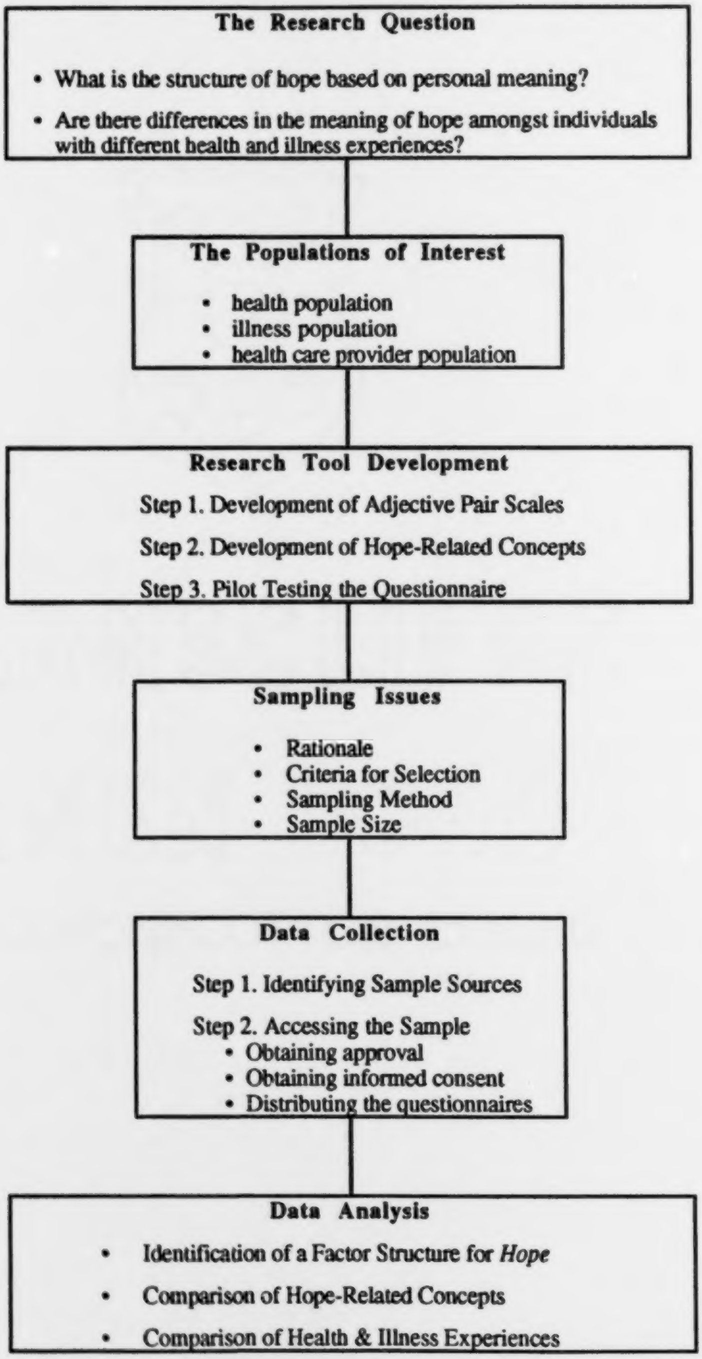
Overview

This study was designed to explore the meaning of hope in health and illness, using a quantitative research methodology. To assist in this exploration, a research tool, based on the semantic differential technique (Osgood & Suci, 1955; Osgood et al., 1957; Snider & Osgood, 1969), was developed. After extensive pilot testing, this tool was distributed to a voluntary adult sample (n=550) in the form of a questionnaire. This voluntary sample was comprised of three subsamples: a health subsample (n=146), an illness subsample (n=159) and a nursing subsample (n=206). Factor analytic procedures were used to identify a structure of hope. Further data analysis procedures included between and within-group comparisons of the three subsamples. A summary of the research design for this study appears in Figure 3.1.

Research Tool Development

The development of a semantic differential research tool for hope paralleled Osgood and his colleagues' original factor analytic research for structuring connotative meaning (Osgood & Suci, 1955; Osgood et al., 1957). The primary goal of this research was to identify a structure for personal meaning, using an objective method, the semantic differential. In this original work, 100 research participants rated 20 different concepts against 50 adjective pair scales. Correlations were calculated between the 50 adjective pairs and the resulting correlation matrix was factor analyzed. The three primary factors of *evaluation, potency* and *activity* were identified, which formed the basis for structuring the domain of connotative meaning. When used for structuring domains, the semantic differential is used as an exploratory tool, as opposed to a tool of measurement. Similar to Osgood et al.'s original work, the initial phase of this study focused on the use of the semantic differential as an exploratory tool, for

Figure 3.1. A summary of the research design for the exploration of the meaning of hope in health and illness.



The Research Question

- What is the structure of hope based on personal meaning?
- Are there differences in the meaning of hope amongst individuals with different health and illness experiences?

The Populations of Interest

- health population
- illness population
- health care provider population

Research Tool Development

Step 1. Development of Adjective Pair Scales

Step 2. Development of Hope-Related Concepts

Step 3. Pilot Testing the Questionnaire

Sampling Issues

- Rationale
- Criteria for Selection
- Sampling Method
- Sample Size

Data Collection

Step 1. Identifying Sample Sources

Step 2. Accessing the Sample
  - Obtaining approval
  - Obtaining informed consent
  - Distributing the questionnaires

Data Analysis

- Identification of a Factor Structure for *Hope*
- Comparison of Hope-Related Concepts
- Comparison of Health & Illness Experiences

structuring the domain of hope.

To develop this exploratory tool, it is important to understand the underlying rationale for using the semantic differential to structure a domain such as hope (Maguire, 1973). Osgood and his colleagues (1957) proposed that any given domain occupies a *semantic space,* an area of unknown dimensionality which is "Euclidian" in nature. Within this space, each semantic or bipolar adjective scale is represented as a straight line that passes through the origin. A sample of these scales defines the semantic space: the more representative the sample of scales, the more complete the definition. In previous work, Osgood et al. showed that the scales clustered into a few dimensions. To adequately define the space, it is important to determine the minimum number of orthogonal dimensions that adequately represent the variation among the sample of scales. The dimensions are defined by their relationship to the adjective scales. Adjectives that are pertinent to the domain of interest form clusters along a given dimension in close proximity to one another. Adjectives that are not pertinent to the domain are located at further distances.

This underlying rationale generates some important implications for the development of a semantic differential for hope. When used in the exploratory mode, the semantic differential is a technique of inquiry, as opposed to a measurement tool. There are no standard scales or concepts. Rather, the domain of interest directs the selection of adjective pair scales and concepts. Since the relationship amongst the adjective scales is used to define the semantic space, it is important that the scales are both relevant and encompassing of the domain under exploration. There is more flexibility in the selection of concepts than adjective pair scales. However, the concepts should generally be representative of the domain and elicit a diversity of responses.

These factors were considered throughout the following steps of research tool development:

(a) Step 1: development of adjective pair scales;
(b) Step 2: development of hope-related concepts; and
(c) Step 3: pilot testing the research tool.

Step 1. Development of Adjective Pair Scales

The development of adjective pair scales was influenced by the intended use of the semantic differential as an exploratory tool. Osgood and his associates (1957) identified three criteria for the selection of adjective pair scales, when using the semantic differential as a tool of measurement: *factorial composition, relevance* and *semantic stability.* However, there are exceptions to these criteria, when using the semantic differential in the exploratory mode.

When using the semantic differential as a *measurement* tool, three criteria direct the selection of adjective pair scales, specifically, factorial composition, relevance and semantic stability (Osgood et al., 1957). *Factorial composition* refers to the selection of adjective pair scales that represent the three factors of *evaluation, potency* and *activity.* Scale selection is based on factor loadings: an adjective pair scale that maximally loads on one factor and minimally loads on the other factors would be an appropriate selection for that given factor. The second criterion, *relevance,* is the appropriateness of a specific adjective pair for a given concept. For example, in rating the construct of hope, an evaluative scale like *beautiful-ugly* may be less relevant than a scale such as *optimistic-pessimistic. Semantic stability,* the third criterion, reflects the degree to which an adjective pair scale remains stable across concepts and research participants. For example, the adjective pair scale *light-heavy* is likely to be used denotatively to describe physical objects, like a feather or a boulder. In contrast, this same adjective pair is likely to be used connotatively to describe a person's reaction to a stressful life event. It is important to select scales that have a common meaning for participants.

When using the semantic differential as an *exploratory* tool, however, there are exceptions to these three criteria, particularly with respect to factorial composition. In the exploratory mode, the factorial composition of the domain of interest is unknown. Osgood et al. (1957) suggest that scales which have unknown factorial composition, but are highly relevant to a particular construct, may be used. To compensate for these untested scales, standard scales of reference, with known factorial composition, should also be included. Thus, nine standard scales from Osgood et al.'s (Osgood & Suci, 1955; Osgood et al., 1957) original factor analytic work were included in the selection of adjective pairs for this study, as markers for the evaluation, potency and activity factors.

Using these criteria as a guide, a number of sources may be used for the development of scales (Maguire, 1973). These include asking people who are knowledgeable in the area to list adjective pairs relevant to the domain, reviewing the literature in the domain of interest for relevant words and phrases, referring to related semantic differential studies and consulting a thesaurus. All of these sources were used at varying stages in the development of the bipolar adjective scales for this study.

An initial list of bipolar adjectives was generated by the investigator, using three primary sources: the investigator's previous research and clinical experiences, the hope literature and related semantic differential studies. Specific hope-related words or phrases used by research participants in a previous study on hope in chronic illness (Nekolaichuk, 1990), as well as by patients experiencing chronic or life-threatening illnesses, were incorporated within the adjective pair list. Adjective pairs representing themes from the hope literature were included, with a particular emphasis on the six dimensions of hope proposed by Dufault and Martocchio (1985). Other adjective pairs were extracted from related semantic differential studies. Some of these pairs were intentionally selected to represent Osgood et al.'s (1957) three factors of evaluation, potency and activity.

This initial list underwent extensive revisions until a final revised list of 50 bipolar adjectives was obtained. The initial list was reviewed by a hope research team, consisting of graduate students and one of the investigator's co-supervisors, who were doing research in the area of hope. The following questions were used as evaluation criteria: (a) Are the adjective pairs relevant to the hope construct? (b) Are there other adjective pairs related to the hope domain that should be included? and (c) Are the adjective pairs semantically opposite? The initial list was revised, deleting irrelevant pairs and adding more pertinent ones. In some cases, changes were made to the adjective pair, itself, to ensure that the adjectives were opposite in nature, with the help of the research team and a thesaurus.

The revised list, consisting of 50 adjective pairs that are relevant to and encompassing of the hope domain, appears in Table A.1, Appendix A. Coincidentally, the number of pairs is the same number that Osgood and his colleagues (Osgood & Suci, 1955; Osgood et al., 1957) used in their initial exploratory research. It is important to note that some of the pairs that were selected are not true adjectives. As shown in Table A.1, these pairs have been labelled as participles. Participles, ending in *-ing* or *-ed,* are extensions of the base form of a verb. For example, the *-ing* participle, *trusting,* is an extension of the base, *trust*; the *-ed* participle, *connected,* is an extension of the base, *connect.* Although participles are generally classified as a verbal form, they may be used as modifiers of nouns, depending on the context. When used as noun modifiers, as in this study, participles function similarly to adjectives (Quirk & Greenbaum, 1973).

A subclassification of these 50 adjective pairs appears in Tables A.2 and A.3 of Appendix A. As shown in Table A.2, nine of the pairs are standard bipolar adjective scales selected from Osgood's (Osgood & Suci, 1955; Osgood et al., 1957) original work. These scales were intentionally selected to mark the factorial composition of evaluation, potency and activity. An additional 16 adjective pairs represent the six dimensions of hope proposed by Dufault and Martocchio (1985), as shown in Table A.3. The remaining 25 adjective pairs are unclassified.

The classification of adjective pair scales according to Osgood et al.'s (1957) semantic differential technique and Dufault and Martocchio's (1985) hope model is not absolute, highlighting the overlap between these two frameworks. For example, the adjective pair, *honest-dishonest,* which is an evaluative marker within the semantic differential framework, could also be classified as a cognitive dimension of Dufault and Martocchio's hope model. Similarly, Osgood et al.'s activity marker, *active-passive,* could also represent a behavioral dimension for hope. This overlap in frameworks could be extended to scales with unknown factorial composition. For example, the adjective pair scales, *caring-uncaring* and *positive-negative,* which were not formally classified, could have been categorized as evaluative scales for the semantic differential.

Step 2. Development of Hope-Related Concepts

Two factors need to be taken into consideration when developing concepts for the semantic differential, *concept format* and *concept number.* The selection of a *concept format* is influenced by the research problem. Osgood et al. (1957) suggest that there is no specific format for a concept, providing that it is relevant to the topic of interest. Historically, concepts were depicted as single nouns. More recently, other formats, such as phrases (Flagler, 1989) or vignettes (Muhlenkamp, Waller & Bourne, 1983), have been used. As with the concept format, the *number of concepts* required for a given study is closely linked to the research topic. This number is based on the adequacy with which the selected concepts sample the domain of interest. Thus, there is no predetermined number which must be included within a semantic differential tool. In Osgood et al.'s (Osgood & Suci, 1955; Osgood et al., 1957) initial development of the semantic differential, 20 concepts were rated against 50 adjective pair scales. In more recent semantic differential studies, fewer concepts have been used, ranging in number from one to four (Bowles, 1986; Flagler, 1989; Muhlenkamp et al., 1983).

Although the format and number of concepts may vary, Osgood and his associates (1957) offer three suggestions for concept selection. They suggest selecting concepts which generate considerable individual response differences; elicit a specific, subjective experience or meaning from the individual; and are familiar to all participants. These suggestions were considered throughout the developmental process of the hope-related concepts.

This second step of research tool development involved a series of revisions of different concepts and formats. Six hope-related scenarios were initially developed by the investigator. These scenarios were reviewed by the hope research team for clarity, relevance to the hope construct and ability to respond from a subjective perspective. Three of these scenarios were eventually deleted, while the remaining three were refined to more accurately depict the personal experience of hope. In addition to the scenarios, three concepts depicting hope in general terms were developed. These refinements resulted in the final selection of six hope-related concepts, representing two basic formats, that is a question format and a story format.

The six hope-related concepts appear in Appendix B. The first three concepts, that is *Hope, A Hopeful Person* and *A Person without Hope,* were each presented in the form of a question. Concepts 4 and 5 were each embedded within the context of a hope story: *Dave's Story,* which is *a story of maintaining hope* and *Karen's Story,* which is *a story of losing hope.* The sixth concept, *A Personal Story of Hope,* was an open-ended response. It provided participants with an opportunity to generate personal experiences, which had challenged their own hope. These six concepts represented different hope experiences within the domain of hope. They were also presented in a sequential order, progressing from general terms to more specific experiences of hope embedded within personal stories.

As noted in Appendix B, there are two versions for the concepts, *Dave's Story* and *Karen's Story.* The first version was used in the pilot study (n=10), as well as during the initial data collection phase primarily involving healthy participants (n=159). The second version was used with the remaining sample (n=391). A further explanation for these two versions is provided under the heading of *Data Collection.*

Step 3. Pilot Testing

Osgood et al. (1957) suggest the use of a standard format for administering the semantic differential. Generally, each concept appears at the top of a page, followed by the list of bipolar adjectives. The order and polarity of the adjective scales is the same for all concepts across all participants. When using the semantic differential in the exploratory mode, it is important to randomly assign the polarity direction of each adjective pair scale, since the factor structure is not known (Maguire, 1973).

Although extensive pilot testing of the tool occurred throughout the first two stages, the third step focused on formally testing the entire research tool. The 50 adjective pair scales were combined with the six hope-related concepts to create a semantic differential research tool specifically for hope. Each hope-related concept was followed by a set of 50 adjective pair scales, with a randomly assigned polarity. The research tool was embedded within a questionnaire, which included an introductory letter and a demographic section (see Appendix C).

The questionnaire was distributed to a pilot sample (n=10), using five members from the hope research team and five individuals who were not directly associated with the study. The purpose of this pilot study was to further assess the relevancy of concepts and clarity of instructions. It was also designed to evaluate the responses to the adjective pair scales, eliminating those scales which had a predominance of undifferentiated responses, that is, a neutral response of "0."

Only *fast-slow* had a predominance of undifferentiated responses when collapsed over the six concepts. The response rate for the neutral category for the *fast-slow* scale was 69%. In spite of this poor discrimination, a decision was made to retain this scale for two reasons. First, although the neutral category was selected most often, the range of responses spanned all seven categories, from the extreme of one adjective to the other. Second, the *fast-slow* scale is a standard reference scale for the activity factor of the semantic differential, and although there are two other scales that were used as markers for the activity factor, retention of *fast-slow* ensured an equal number of markers for Osgood's (Osgood et al., 1957) three factors.

Summary

A summary of the stepwise approach for the research tool development is presented in Figure 3.2. The development of a semantic differential tool to structure the domain of hope is an extension of the original factor analytic work by Osgood and his colleagues (Osgood & Suci, 1955; Osgood et al., 1957). Osgood et al.'s nine standard scales of reference serve as important markers for the semantic differential factors of

Figure 3.2. Stepwise approach for the development of a semantic differential for the hope construct.

Step 1. Development of Adjective Pair Scales

- Are the scales relevant to the domain of interest and the concepts?
- Are the three factors of *evaluation, potency and activity* represented by standard scales of reference?
- Do the scales have a common meaning for participants?
- Are the adjective pairs semantically opposite?
- Are the scales encompassing of the domain of interest?

Step 2. Development of Concepts

- What format is most appropriate for the concepts?
- How many concepts are sufficient to sample the domain of interest?
- Are the concepts relevant to the domain?
- Will the concepts generate a diversity of responses?
- Will the concepts elicit a specific, personal or connotative meaning from the participants?
- Will the concepts be familiar to the participants?

Step 3. Pilot Testing

- Are the instructions clear?
- Are the concepts relevant and familiar to the participants?
- Do the scales reflect a diversity of responses? Are there any scales that do not differentiate well?

evaluation, potency and activity. However, the inclusion of adjective pair scales representing the six dimensions of hope (Dufault & Martocchio, 1985), as well as unclassified, yet relevant scales, extend Osgood et al.'s initial framework. The development of hope-related concepts, ranging from general terms to more specific hope stories, provides a sampling of the hope domain using different concept formats. Extensive pilot testing throughout the three steps strengthens the utility of this tool. This extensive, stepwise approach for the research tool development provides a solid foundation for the exploration of the meaning of hope.

Sampling Issues

The selection of the sample for this study represented a major challenge. Two factors influenced the sample selection process: the use of the semantic differential as an exploratory tool and the nature of the populations of interest. When using the semantic differential as an exploratory tool, the selection of the sample is closely related to the research tool development (Maguire, 1973). It is important to select individuals who are familiar with the domain of interest, as well as the scales and concepts. Thus, the population from which the sample is to be drawn should be defined prior to the development of the research tool.

Three populations of interest were identified at the outset of this study, a healthy adult population, an illness population and a health care provider population. The heterogeneity of and restricted accessibility to some of these populations presented a number of challenges, raising the following questions:

(a) What was the underlying rationale for the selection of the healthy adult, illness and nursing populations?

(b) What criteria should be used to select individuals from these three populations?

(c) Given the nature of this research and the populations of interest, what would be the most appropriate sampling method?

(d) What would be an appropriate sample size?

Sample Selection Rationale

This study was designed to sample the experiences of individuals across the contexts of both health and illness. There are varying opinions as to whether or not individuals experience hope within both contexts. Some have suggested that hope emerges within the context of adversity or uncertainty (Dufault, 1981; Jevne, 1993; Pruyser, 1987), as one might experience with a chronic or life-threatening illness. Others have suggested that hope is an integral component of living and therefore exists within all individuals on a daily basis. However, it becomes more visible during times of uncertainty (Starck, 1993). These differences in perspectives give rise to the question, "Are there differences in the personal meaning of hope between individuals who are healthy and those who have experienced adversity, such as an illness?"

This question, regarding differences between health and illness, gives rise to a follow-up question specific to the context of illness: "Does the nature of the illness experience influence the personal meaning of hope?" In an attempt to answer this question, two different subsamples from the illness context have been selected for this study: a patient or illness subsample and a health care provider subsample. By using these two subsamples, a comparison of the personal meaning of hope can be made between people, who directly experience illness, and health care providers, who indirectly experience illness through caregiving. The health care provider subsample has been limited to nurses, who are actively practising within clinical settings. The nursing profession was selected as all nurses have had experience as primary caregivers, providing direct patient care.

The question of whether or not individuals perceive hope differently, depending on their illness experience, may also be explored within the illness subsample, itself. Most of the hope research has focused on individuals with terminal or life-threatening illnesses, based on the underlying assumption that hope emerges during times of adversity. However, clinical observations suggest that people may struggle with the meaning of hope during different phases of the illness, including the initial diagnosis and the exacerbation or recurrence of the illness. Little research has been conducted in the hope research field across varying stages of the illness pathway. Thus, the illness subsample was intentionally selected to represent a wide diversity of illness experiences, ranging from potentially controllable, chronic conditions to uncontrollable, potentially terminal conditions. These illness experiences may represent the following stages of illness: newly diagnosed; stabilized, non life-threatening; remission or complete recovery; progressive, life-threatening; and end-stage disease.

To represent life-threatening, potentially progressive illnesses, individuals with cancer were included in the illness subsample. The types of cancer, intentionally included in this subsample, were breast cancer, chronic malignant pain and gastrointestinal cancer, primarily liver and colon cancer. Breast cancer is the leading cause of premature death and the most common cause of cancer deaths in women. Patients with chronic malignant pain problems and liver cancer are likely to have progressive, life-threatening disease. Colon cancer is the second leading cause of death from cancer, superseded only by lung cancer.

Selection Criteria

The criteria for selection were divided into two categories: general criteria, common to all participants, and specific criteria, unique to each of the three subsamples. The general criteria for selection included those individuals who were 18 years of age or older; of either gender; able to read English and give consent; and not cognitively impaired. In addition to these general criteria, some specific criteria were identified for the each of the three subsamples. For the ***health subsample,*** the criteria for selection included those individuals with a ***good to excellent*** health status and no current or previous illness experience. For the ***illness subsample,*** the main criterion was that individuals had experienced a chronic, serious or life-threatening illness, at some time in their lives. This experience was irrespective of their current health status. For the ***nursing subsample,*** the criteria for selection were based on level of training and employment status. This subsample consisted of student nurses and practising nurses, working either full-time or part-time in a clinical setting.

Sampling Method

Traditionally, distinct boundaries have been drawn between quantitative and qualitative sampling methods. Patton (1990) describes the differences between the *random sampling* method of quantitative inquiry and the *purposeful sampling* method of qualitative inquiry. Generally, the primary focus of random sampling is to select a representative sample of the population that would then be generalizable to the population of interest. In contrast, the primary focus of purposeful sampling is to select "information-rich cases," which would provide indepth information about the topic of interest. In addition to differences in focus, these two methods of inquiry generally use contrasting sample sizes. Quantitative methods integrate larger samples, while qualitative methods primarily focus on smaller, indepth samples. An exception to this contrast in sample size is the qualitative method of participant observation, in which large sample sizes may be accessed. In general, however, these differences in focus and sample size traditionally define these two distinct methods of inquiry.

The random sampling method is generally the method of choice for quantitative research. An ideal random sample would represent an unbiased, cross section of the population of interest. Although ideal, this sampling method may not always be practical or feasible. For example, Osgood and his colleagues (Osgood & Suci, 1955; Osgood et al., 1957) selected a sample of 100 undergraduate students in introductory psychology for their original factor analysis of meaning. This sample was favored over a random sample of the general population due to the convenience of the sample, as well as the level of sophistication of the instrument. In this study, a random sample would have been difficult to obtain, particularly from the healthy adult and illness populations. These two populations are not socially or culturally discrete and are thus, difficult to access randomly. Further, participants, familiar with the hope domain and likely to encompass the diversity of responses, were required for the sample. The random sampling method would not have guaranteed the selection of these types of participants.

Given the nature of the populations of interest and the need for a knowledgeable, diverse sample, the qualitative perspective of purposeful sampling was adapted and applied to this study. The logic of identifying information-rich cases, from an individual perspective, was extended to the identification of information-rich cases, from a group perspective. Intact groups which were in some way related to health, illness or nursing were identified as potential "information-rich cases." Using this approach, there was an intentional sampling of a diverse set of groups, which were representative of the three populations of interest.

Once these "information-rich" groups were identified, the process for accessing individual participants varied from group to group. In most cases, individual group members volunteered to participate. The one exception to the use of voluntary participation was for the professional nursing group, the Alberta Association of Registered Nurses (AARN). For this group, a random sample was obtained from the organization's membership list. The total membership, as of October 1, 1993, consisted of approximately 23,000 nurses. From this total, a list of practising nurses was generated, with the assistance of a computer coordinator at the AARN. This list was comprised of part-time and full-time registered nurses in Alberta, working in a hospital setting in one of six clinical areas (n=11,729). These six areas included medicine, surgery, emergency medicine, critical care, geriatrics and multiple clinical areas. Based on this list, 70 nurses were randomly selected from each clinical area, for a total of 420 nurses. The specific methods for accessing participants within groups will be discussed in more detail under the heading of *Data Collection.*

Sample Size

Generally, large sample sizes are required to conduct a factor analysis of the data, as correlation coefficients tend to be less reliable from small samples. A large sample size may be defined as five to ten times the number of variables, but not less than 200 (Gorsuch, 1983). Tabachnick and Fidell (1989) provide a general rule of thumb of having at least five cases for each observed variable. However, they further suggest that if there are strong, reliable correlations and a few, distinct factors, then a smaller sample size may be used providing that there are more cases than factors.

In this study, the total number of variables or adjective pair scales was 50. Thus, using Gorsuch's (1983) guidelines, the number of participants should range from 250 to 500, which would be 5 to 10 times the number of variables. Based on Tabachnik and Fidell's (1989) rule of thumb, the minimum number of participants should be 250. The actual sample size used for the factor analysis was 550 which is more than adequate, based on these guidelines.

Data Collection

A two-step process was used for data collection. The first step involved the identification of potential sample sources. For this study, the primary sources for the sample were intact groups. In some cases, however, participants who met the criteria for the study were referred through individual contacts. Once the sample sources were identified, the second step of data collection focussed on accessing individual participants. This second step consisted of obtaining appropriate approval, clarifying the nature of informed consent and distributing the questionnaires. The data for each of the three subsamples were collected concurrently from multiple sources. The questionnaires were distributed either in person or by mail, depending on the source. Participants returned the completed questionnaires to the investigator either in person or by mail. A stamped, addressed return envelope was included with each questionnaire to assist in this process. This two-step data collection process is discussed in more detail in the following sections.

Step 1. Identifying Sample Sources

The principle of purposeful sampling was applied to the identification of sample sources. Ideally, information-rich groups that are specific to each of the three populations of interest would be selected. Practically, the selection of a group that is unique to a single population of interest was not always feasible, particularly for the health and illness populations. Some information-rich groups provided services to more than one of these populations of interest. Thus, wherever possible, groups that were unique to a given population were selected. However, in some cases, a single group provided access to more than one of the populations of interest.

Potential information-rich groups were identified for each of the three subsamples. General group categories relating to health, illness and nursing were initially generated. Within these general categories, specific groups were targeted for each of the subsamples. A comprehensive listing of the potential sample sources, categorized by subsample and group, appears in Table 3.1.

Although these groups have been categorized by subsample, this categorization is not absolute. As shown in Table 3.1, some groups had more restricted group memberships than others. In some cases, group membership was limited to a specific population of interest, such as the outpatient clinics at the Cross Cancer Institute, or the professional nursing group, the AARN. In other cases, such as the Edmonton Public Library or The Hope Foundation of Alberta, group membership was not restricted, potentially providing access to more than one population.

For the ***health subsample,*** groups that provided services to the general public were identified as potential sources. These groups, which are summarized in Table 3.1, included community service agencies, general and health-oriented educational programs, caregiver support groups, church groups and athletic groups. Since these groups were directed to the general public, as opposed to a purely healthy population, these same groups potentially provided access to the illness subsample, and to a lesser extent the nursing subsample.

For the *illness subsample,* groups that represented a diversity of illness experiences, including both cancer and noncancer illnesses, were identified. As shown in Table 3.1, illness-oriented educational programs, health organizations and agencies, and patient support groups were identified as primary sources. Specific groups were targeted for individuals with cancer, specifically, the *Breast Cancer Forum,* the outpatient clinics at the Cross Cancer Institute, and a CanSurmount support group. Although the CanSurmount group was targeted for individuals with cancer, this group provided support to family members, as well. Thus, the CanSurmount group was also a potential source for the other two subsamples. Other groups, such as some of the

Table 3.1

Identification of Information-Rich Groups as Potential Sources for the Three Subsamples

Subsample	Groups
Health	**Community Service Agencies**[a]
	• The Hope Foundation of Alberta
	• Edmonton Public Library
	• Big Sisters of Edmonton
	• Support Network
	Educational Programs & Services[a]
	• Program for Seniors, U of A
	• Sudden Infant Death Syndrome Conference
	• Edmonton Public School Board
	• Multicultural Health Conference
	Support Groups (Caregiver)[a]
	• Tough Love Parenting Group
	• Parents of Mentally Handicapped Children
	Church Groups[a]
	• Riverside Baptist Church, Devon
	• St. Albert United Church
	Athletic Groups[a]
	• Community League Volleyball Team
Illness	**Illness-Related Educational Programs**[a]
	• Palliative Care Conference, Calgary
	• Wholistic Alternatives, Grant MacEwan
	• New Strategies for Health (EBH)
	• Breast Cancer Forum
	Health Organizations & Agencies[b]
	• Outpatient Clinics, Cross Cancer Institute
	• Breast Cancer Patient Support Group
	• Gastrointestinal (GI) Clinic
	• Pain and Symptom Clinic
	• Ermineskin Physiotherapy Clinic
	Support Groups (Patient)
	• CanSurmount[a]
	• Chronic Pain Support Group[b]
Nursing	**Schools of Nursing**[b]
	• University of Alberta, 4th year
	• Royal Alexandra Hospital, 2nd year
	Professional Nursing Group[b]
	• Alberta Association of Registered Nurses
	Health Organizations & Agencies
	• Dept of Nursing, Cross Cancer Institute[b]
	• Nursing Division, Edmonton Board of Health[b]
	• Mental Health Therapist Interest Group[a]

[a] Unrestricted group membership. [b] Group membership restricted to a single population of interest.

educational programs, the Ermineskin Physiotherapy Clinic and a Chronic Pain Support Group were potential sources for individuals with illnesses other than cancer. It is also important to note that the community service agency, *The Hope Foundation of Alberta*, categorized under the health subsample, was an additional source for the illness subsample.

For the ***nursing subsample,*** groups that represented a diversity of training and clinical experiences for student and practising nurses were identified (see Table 3.1). Two schools of nursing were selected as potential sources for student nurses. A professional nursing group and specific health organizations and agencies were used to access practising nurses. The AARN was selected to access nurses who were clinically active in the areas of medicine, surgery, geriatrics, critical care and emergency medicine. The Cross Cancer Institute was identified as a source for oncology nurses, while the Edmonton Board of Health provided access to nurses working in the areas of public health and home care. A professional interest group for mental health therapists served as a source for nurses actively working in the mental health area.

Step 2. Accessing the Sample

Once the potential sample sources were identified, then different approaches were implemented to access the sample. This second step of data collection focused on obtaining appropriate approval, clarifying the requirements of informed consent and distributing the questionnaires. The requirements for accessing the sample varied from group to group. However, in general, the groups could be categorized according to three different approaches for accessing the sample. The reorganization of the groups, according to these three approaches, appears in Table 3.2.

As shown in Table 3.2, for Group I, verbal approval was obtained, informed consent was verbal or implied and the method of distribution was in person. For

Table 3.2

Classification of the Sample Sources According to the Three Methods for Accessing the Sample

Sample Sources	Type of Approval			Type of Consent		Distrib Method	
	v	**w**	**ec**	**v/i**	**w**	**ip**	**m**
GROUP I							
Community Service Agencies							
• The Hope Foundation of Alberta	●			●		●	
• Edmonton Public Library	●			●		●	
• Big Sisters of Edmonton	●			●		●	
• Support Network	●			●		●	
Educational Programs & Services							
• Program for Seniors, U of A	●			●		●	
• SIDS Conference	●			●		●	
• Palliative Care Conference, Calgary	●			●		●	
• Edmonton Public School Board	●			●		●	
• Wholistic Alternatives Conference	●			●		●	
• Multicultural Health Conference	●			●		●	
• New Strategies for Health, EBH	●			●		●	
• Breast Cancer Forum	●			●		●	
Support Groups							
• Tough Love Parenting Group	●			●		●	
• Parents of Mentally Handicapped Children	●			●		●	
• CanSurmount	●			●		●	
• Chronic Pain Support Group	●			●		●	
Church & Athletic Groups							
• Riverside Baptist Church, Devon	●			●		●	
• St. Albert United Church	●			●		●	
• Community League Volleyball Team	●			●		●	
Health Organizations & Agencies							
• Ermineskin Physiotherapy Clinic	●			●		●	
• Mental Health Therapist Interest Group	●			●		●	
Schools of Nursing							
• University of Alberta, 4th year	●			●		●	
• Royal Alexandra Hospital, 2nd year	●			●		●	
GROUP II							
• Edmonton Board of Health		●		●		●	
• Alberta Association of Registered Nurses		●		●			●
GROUP III							
• Cross Cancer Institute			●		●	●	

Key:				
	v	verbal	v/i	verbal or inferred
	w	written	ip	in person
	ec	ethics committee	m	mail-out

Group II, written documentation was required, informed consent was verbal or implied and the method of distribution was either in person or by mail. For Group III, formal ethical approval was required, informed consent was in writing and the method of distribution was in person. The following is a more detailed description of these three approaches for accessing the sample.

Group I

As shown in Table 3.2, most groups required verbal approval only. To obtain verbal approval, the investigator contacted a group representative, who was in a leadership position within the group. Approval for this study was granted by this individual. Written informed consent was not required. Consent to participate was obtained verbally, when the questionnaires were distributed in person, or inferred from those participants who returned completed questionnaires. Most questionnaires were distributed in person by the investigator, by individuals who were familiar with the research or by representatives from specific groups. Wherever possible, the nature of the research was explained to the participants by the investigator. In cases where the questionnaires were distributed by individuals other than the investigator, the individuals were informed about the nature of the research by the investigator. This information was also provided in a covering letter, attached to each questionnaire, as shown in Appendix C. A total of 995 questionnaires were distributed in this manner.

Group II

As shown in Table 3.2, the requirements for Group II differed slightly from the first group. In contrast to Group I, written documentation, rather than verbal approval, was required. In addition, the method of distribution was either in person or by mail. Two organizations were classified under Group II: a health care agency, the Edmonton Board of Health, and a professional nursing group, the AARN. The specific methods for accessing the sample from these two organizations will be discussed separately, as there were some notable differences.

Edmonton Board of Health. The Edmonton Board of Health was considered as a source for a portion of the nursing subsample, representing nurses actively working in the clinical areas of public health and home care. Within these two clinical areas, approximately 150 staff were employed in nine health centres and three home care offices in Edmonton at the time of this study. A copy of the research proposal, as well as a letter outlining the nature of the research, was forwarded to the Director, Nursing Division, and the Assistant Director, Home Care Division, at the Edmonton Board of Health. These two individuals reviewed this information prior to granting approval for this study.

Once approval was granted, a total of 77 questionnaires were distributed within the two divisions of public health and home care. For the public health division, the Director of Nursing discussed this study at a supervisory staff meeting. Questionnaires were subsequently distributed to each of the nine health care centres by the supervisory staff. For the home care division, the investigator directly contacted the supervisors at the three home care offices. At two of the home care offices, the questionnaires were distributed by the nursing supervisors. At the third home care office, the investigator distributed the questionnaires in person, discussing the nature of this research directly with the nursing staff. As the investigator was not able to personally distribute all of the questionnaires, a covering letter directed to the Edmonton Board of Health nursing staff was included with each questionnaire (see Appendix D). Individuals who required further information about this study could also contact the investigator directly. A written consent was not required from participants. Consent to participate was inferred from those participants who returned completed questionnaires to the investigator.

AARN. The AARN was selected to access a sample of practising nurses working in clinical areas other than public health, home care or oncology. Permission to access a nursing sample from this organization was submitted in writing to the Executive Director, AARN. Once approval was obtained, the investigator contacted the computer coordinator at the AARN for assistance in sample selection. As the AARN does not grant investigators direct access to the membership, a random sample (n=420) was generated from the membership list by the computer coordinator. The investigator did not have direct access to the list of participants comprising this sample. Rather, the questionnaires were mailed to potential participants through the AARN, on behalf of the investigator. A covering letter, specifically directed to nursing, was included with the questionnaire (see Appendix D). Informed consent was inferred from the return of completed questionnaires.

Group III

In contrast to the first two groups, formal ethical approval and written consents were required from Group III, the Cross Cancer Institute. The Cross Cancer Institute was selected as a source for both the nursing and illness subsamples, specifically directed at practising oncology nurses and cancer patients, respectively. The selection of cancer patients was limited to individuals with breast cancer, gastrointestinal cancer or chronic malignant pain.

Prior to accessing these samples, formal ethical approval was required. A written submission and oral presentation was initially made to the Clinical Priorities Committee at the Institute. A formal submission and oral presentation was then made to the Research Ethics Committee, Alberta Cancer Board. This committee granted approval for this study, pending some clarifications of the proposal and changes to the questionnaire. With respect to the questionnaire, some of the committee members were concerned with the wording of two of the story-formatted concepts, *Dave's Story* and *Karen's Story*. Thus, the committee recommended some specific changes in wording.

The request to change the wording of these two stories was carefully considered by the investigator and her two co-supervisors. At the time of this submission to the Research Ethics Committee at the Alberta Cancer Board, this research was already in progress. This study had previously received ethical clearance from the Ethics Review Committee, Department of Educational Psychology, University of Alberta. There had been no concerns expressed about the two stories by this committee or by any of the individuals who had been involved in the research tool development phase. The two versions of these stories appear in Appendix B. The differences between the two versions are highlighted in italics. After careful consideration, it was the investigator's and co-supervisors' impressions that the wording changes would not affect the intent of each story. Thus, a decision was made to honor the request of the Research Ethics Committee. Subsequently, for the remainder of the data collection phase, the questionnaires were revised, using the second version of *Dave's Story* and *Karen's Story*.

Once ethical approval was obtained, potential participants for the *nursing subsample* were contacted through the Department of Nursing. The investigator initially presented this research at a nurse managers' meeting. Subsequently, ward meetings were arranged with nursing staff from each of four clinical areas, specifically, day care, inpatients, outpatients and the operating room. Questionnaires were distributed directly to those individuals who expressed an interest in participating. Additional questionnaires were also left in each of these clinical areas for those nurses who had been unable to attend the ward meetings. A consent form, to be signed, was included with the questionnaire (see consent forms, Appendix E). Nurses who were interested in participating were expected to complete the questionnaires on their own, unpaid time. They were responsible for returning the completed consent forms and questionnaires to the investigator. A total of 37 questionnaires were distributed in this manner.

For the *illness subsample,* this research was discussed with the staff directly involved in the three outpatient clinics, specifically the Pain and Symptom Clinic, the Gastrointestinal Clinic and the Body Awareness and Intimacy Clinic. With the assistance of this staff, potential participants were identified. For the Pain and Symptom Clinic and the Gastrointestinal Clinic, the nature of the research was explained to the participants by the investigator. For the Body Awareness and Intimacy Clinic, the questionnaires were distributed by the staff psychologist who coordinates the breast cancer support groups. A signed consent form was obtained, prior to distributing the questionnaire (see Appendix E). One copy of the form was placed on the patient's chart, while a second copy was given to the patient to keep. Patients completed the questionnaires on their own time and returned them to the investigator by mail. A total of 48 questionnaires were distributed to potential participants for the illness subsample.

Response Rates

A number of methods were used to help increase the response rate of the sample. (a) *Questionnaire format:* The purpose and nature of the research was explained in an introductory letter which was attached to the questionnaire. For the portion of the nursing sample obtained through the EBH and the AARN, an additional covering letter, appealing directly to nursing, was included. The questionnaire, itself, was professionally prepared.

(b) *Credibility of the research:* Participants were informed of the affiliation of the research at the University of Alberta, either verbally or in writing.

(c) *Involvement of the investigator:* Whenever possible, the investigator provided an in person overview of the research to potential research participants within group settings or on an individual basis. When the investigator was not able to personally distribute the questionnaires, individuals who distributed the questionnaires were informed about the study by the investigator.

(d) *Collection of completed questionnaires:* A stamped, addressed return envelope was included with each questionnaire. In some cases, the investigator returned to the data collection site to collect completed questionnaires.

(e) *Ethical concerns:* All responses to the questionnaires were anonymous. For those questionnaires that were distributed in person, participants were informed that their involvement in this study would be kept confidential.

Data Analysis

The analysis of the data was divided into three distinct phases. Within the first phase, data from the total sample (n=550) were analyzed to identify a factor structure for the concept, *Hope*. During the second phase, this structure was compared with the factor structures of the five remaining hope-related concepts, again using the total sample. In the third phase, between and within-group comparisons of factor means were conducted, using the total sample (n=550), as well as the three subsamples of health (n=146), illness (n=159) and nursing (n=206).

Phase 1. Identification of a Factor Structure for *Hope*

The first stage of analysis focused on the identification of a factor structure for the concept, *Hope*. Correlations were calculated between pairs of the 50 bipolar adjective scales, using the entire sample of 550 people. The resulting correlation matrix was analyzed, using principal components and the roots greater than one criterion. The number of significant extracted factors was identified, using the scree test. These factors were rotated both orthogonally, using a varimax procedure, and obliquely, using oblimin. The factor structure was interpreted using the orthogonal rotation.

Based on the factor interpretation, the factor structure for the concept, *Hope,* was refined. The original pool of 50 variables was reduced to 24 variables. Correlations were calculated between the pairs of the 24 variables, again using the total sample of 550. A principal components was applied to the resulting correlation matrix and the extracted factors were rotated to the varimax criterion. This factor structure was interpreted and compared with Osgood et al.'s (1957) and Dufault and Martocchio's (1985) frameworks. To assist in the comparison with Osgood et al.'s framework, factor means for the concept, *Hope,* were correlated with the factor means for the adjective pair markers, representing the three factors of evaluation, potency and activity.

Phase 2. Comparison of Hope-Related Concepts

The second stage of data analysis examined the variability of the refined factor structure for the concept, *Hope,* across the other hope-related concepts. Factor means for the concept, *Hope,* were compared with the factor means for each of the five remaining concepts, *A Hopeful Person, A Person without Hope, Dave's Story, Karen's Story* and *A Personal Story of Hope.* In addition to the factor mean comparisons, factor structures were also compared. For each of the five remaining concepts, correlations were calculated between pairs of the 24 bipolar scales from the refined factor structure for *Hope*. The resulting correlation matrix was analyzed using principal components. The extracted factors were rotated orthogonally to the varimax criterion. The resulting factor structure, for each of the five concepts, was then compared with the factor structure for *Hope*.

The identification of factor structures for the two concepts, *Dave's Story* and *Karen's Story*, requires further elaboration. As there were two versions for these concepts, a decision needed to be made regarding the sample size for the factor analysis. The factor means were calculated for both versions of the two stories. For each story, the factor means for the first version (n=159) were compared with the factor means for the second version of the story (n=391). Using an effect size of .60 as a critical level, there were no significant differences between factor means, except for Factor II for *Dave's Story*. Based on these findings, it can be concluded that the two versions for *Karen's Story* are not significantly different and can therefore be combined. For *Dave's Story*, ratings of these two versions differed significantly on the second factor, only. Thus, some caution may be warranted in interpreting this factor. In spite of this difference, however, a decision was made to combine the scores for both versions of *Dave's Story*, as well. Thus, the factor structures for the concepts, *Dave's Story* and *Karen's Story*, were derived from the total sample of 550 participants.

Phase 3. Comparison of Health and Illness Experiences

During the third phase of data analysis, the factor means of groups, representing different health and illness experiences, were compared. Factor means of the health (n=146), illness (n=159) and nursing (n=206) subsamples were initially compared.

Based on these findings, within group factor mean comparisons were made for specific health and illness variables, using the three subsamples and the total sample.

Because of the large number of comparisons to be made, it was decided to set a criterion for differences based on effect size. The effect size can be used to estimate the extent of mean differences, particularly when the dependent variable, in this case the factor mean scores, has an arbitrary numerical scale (Glass & Hopkins, 1984). The effect size was calculated by dividing differences in factor mean scores for a specific group comparison by the average standard deviation of the combined factor means for all six concepts. The average standard deviation for the factor means of the combined concepts was approximately .50. For the purposes of this study, the critical level was set at an effect size of .60, which is approximately two-thirds of a standard deviation for the combined factor means. Thus, when comparing factor means, a difference between means of .30 or greater was considered important. For sample sizes of at least $n_1=n_2=20$, such a difference would be significant at $p<.05$.

Reliability and Validity Issues

Numerous approaches can be used to evaluate the reliability and validity of the semantic differential tool. With respect to reliability, the semantic differential has been adapted to a variety of concepts. High test-retest reliabilities, that are not appreciably affected by the nature of the concepts or the type of participants, have been reported (Snider & Osgood, 1969). These reliabilities range from .85 for measurement of meaning to .93 for measurement of attitude. With respect to validity, a number of validity checks were integrated throughout the research design. For content validity, the list of bipolar adjectives and the hope-related concepts were reviewed by the hope research team. Construct validity was determined by comparing the dimensions of hope identified in this study with the hope literature, as well as Dufault and

Martocchio's (1985) six dimensions of hope. In addition, the semantic differential for hope was validated against Osgood et al.'s (1957) three dimensions of evaluation, potency and activity.

Ethical Considerations

A number of ethical issues were considered throughout the design of this study. These issues included informed consent, voluntary participation, confidentiality and anonymity. Appropriate steps were also taken to obtain approval for this research from different sources, ranging from informal verbal approval to formal approval from ethics review committees.

The ethical issue of informed consent was addressed in a number of different ways. A covering letter, outlining the nature of the research, was attached to each questionnaire. Wherever possible, the investigator explained the nature of the research to the participants in person prior to the completion of the questionnaire. For those participants from the Cross Cancer Institute, a written consent, outlining the ethical guidelines of the Institute, was obtained. For those participants derived from sources other than the Cross Cancer Institute, a formal consent form was not used. Consent to participate was received either directly in person or inferred from those participants who returned completed questionnaires.

The ethical issues of voluntary participation, confidentiality and anonymity were incorporated in the study design. Participants were free to disregard any questions on the questionnaire or to withdraw from the study, at any time. Confidentiality and anonymity were maintained throughout. For those questionnaires distributed in person, the participants' involvement in this study was kept confidential. In addition, the responses to all questionnaires were anonymous, as the participants were not asked for any information that would identify them personally. Similarly, the study results were not directly linked to any of the participants.

Ethical approval of this study was obtained from a number of sources. This study was approved by the internal ethics review committee in the Department of Educational Psychology, The University of Alberta, prior to data collection. A proposal was submitted to the Ethics Review Committee, the Alberta Cancer Board, prior to accessing participants from the Cross Cancer Institute. Although a formal ethical review was not required from the Edmonton Board of Health and the AARN, written documentation was required by these two organizations. This information was reviewed by the nursing administrators of the Nursing Division, EBH, and the Executive Director, AARN, before approval for accessing participants from these two sites was granted.

CHAPTER FOUR

INTRODUCTION TO THE FINDINGS

The findings from this study have been divided into four separate sections: (a) a description of the sample; (b) an identification of a factor structure for the concept, *Hope;* (c) a comparison of the factor structure for *Hope* with other hope-related concepts; and (d) the identification of important differences in the meaning of hope between and within the three subsamples of health, illness and nursing. Chapter Four introduces the reader to the nature of the sample, highlighting response rates, sample sources and specific demographic information. It also provides an overview of the next three chapters. Chapters Five to Seven present an indepth summary and discussion of the remaining findings.

Nature of the Sample

Response Rates

Of the 1635 questionnaires that were distributed, 556 were returned, for an overall response rate of 34%. However, six of these returned questionnaires were considered invalid and were subsequently not used in the data analysis. One of the participants, who was under the age of 18 years, did not meet the age criterion for this study. Four participants incorrectly completed the questionnaires by providing more than one response per scale. One participant was late in returning the questionnaire, after the initiation of the data analysis phase. Thus, the total number of valid questionnaires was 550, resulting in a response rate of 33.6%. A summary of the response rates for the total sample, based on general group categories, appears in Table 4.1. A more detailed summary of response rates, based on specific groups within each group category, is presented in Table F.1, Appendix F.

The total number of participants completing valid questionnaires (n=550) was subdivided into the three subsamples of *health* (n=146), *illness* (n=159) and

Table 4.1

Response Rates for the Total Sample (n=550) Based on General Group Categories

Sources	Frequency (Distrib)	Frequency (Returns)[a]	Response Rate (%)
Community Service Agencies	447	141	31.5
Professional Nursing Group	420	118	28.1
Educational Programs & Services	285	94	33.0
Health Organizations & Agencies	185	66	35.7
Schools of Nursing	111	45	40.5
Support Groups	61	30	49.2
Church Groups	38	14	36.8
Athletic Group	30	11	36.7
Other[b]	58	27	46.6
Missing[c]	---	4	---
TOTAL	1635	550	33.6

[a] Frequency of returns represents the number of valid questionnaires returned.
[b] This category refers to individual contacts with participants who were not part of an intact group.
[c] The source of the data was missing.

nursing (n=206). Of the total sample (n=550), 39 participants were excluded from these three subsamples for varying reasons. Within the *health subsample,* 151 individuals met the first criterion of not having any experience with illness. Of this total, 5 participants were excluded, however, as they failed to meet the second criterion of health status. These five individuals rated their health as *fair to poor,* in the absence of any illness experience. Thus, the total number of valid cases for the health subsample was 146. Within the *illness subsample,* 159 participants had experienced a serious, chronic or life-threatening illness at some point in their lives. Within the *nursing subsample,* a total of 229 nurses responded to the questionnaire. Of the 229 nurses, 23 nurses were excluded due to their employment status, resulting in a subsample total of 206. These excluded nurses were casually employed, unemployed or on a maternity or disability leave. Eleven nonnursing cases were missing information about the illness experience. These 11 cases were excluded from the three subsamples. The frequency distribution of the three subsamples appears in Table 4.2.

Sample Sources

The sources for each of the three subsamples, based on general group categories, is summarized in Table 4.3. As shown in this table, the two most common sources for both the *health subsample* and the *illness subsample* were community service agencies and educational programs and services. Other less common sources for these two subsamples included support groups, church groups, an athletic group and individual contacts. An additional source unique to the illness sample was health organizations and agencies, which included the outpatient clinics at the Cross Cancer Institute and an outpatient physiotherapy clinic. For the *nursing subsample,* the three most common sources were professional nursing groups, schools of nursing and health organizations and agencies, specifically the Cross Cancer Institute and the Edmonton Board of

Table 4.2

Frequency Distribution of the Total Sample (n=550) Categorized by Health, Illness and Nursing

Subsample	Frequency	Percent
Health Subsample		
• No illness experience, health status *good to excellent*	146	26.6
• No illness experience, health status *fair to poor*	5*	0.9
Illness Subsample		
• Illness experience	159	28.9
Nursing Subsample		
• Student and Practising Nurses[a]	206	37.5
• Nonpractising Nurses[b]	23*	4.2
Missing Data[c]	11*	2.0
TOTAL	550	100.1

[a] Practising nurses are those nurses who are working either full-time or part-time in a clinical setting.

[b] Nonpractising nurses are those nurses who are not working full-time or part-time in a clinical setting. This group was comprised of nurses who were on disability or maternity leave; unemployed or doing casual/relief work.

[c] Illness experience not specified.

*Excluded from subsample

Table 4.3

Sources of the Three Subsamples Based on General Group Categories

	Frequencies				
Sources	Health Subsample	Illness Subsample	Nursing Subsample	Non-Classified	Total Sample
Community Service Agencies	61	62	7	11	141
Professional Nursing Group	0	0	99	19	118
Educational Programs & Services	43	44	4	3	94
Health Organizations & Agencies	0	19	43	4	66
Schools of Nursing	0	0	45	0	45
Support Groups	10	16	4	0	30
Church Groups	8	5	1	0	14
Athletic Group	7	4	0	0	11
Other[a]	15	8	3	1	27
Missing[b]	2	1	0	1	4
TOTAL	146	159	206	39	550

[a] This category included individual contacts with participants who were not part of an intact group.
[b] Source of data was missing.

Health. Some additional sources for the nursing subsample that were less common included community service agencies, educational programs, support groups, church groups and individual contacts. A more detailed summary of the subsample sources, categorized by specific groups, is presented in Table F.2, Appendix F.

Demographics

Total Sample

The sample of 550 participants represented a diverse group of individuals. The age of the individuals ranged from 18 to 84, with an average age of 42 years (SD=14). This sample was predominantly comprised of women, with a gender distribution of approximately 85% females and 15% males. This disproportionate gender distribution is partially related to the intentional sampling of nursing, which is predominantly a female profession. Approximately 60% of individuals were married, while the remaining 40% were either single, divorced, separated or widowed. A majority of individuals (i.e. 87%) had received postsecondary education, averaging approximately 4 years of advanced training (SD=2.4). This higher education level was also influenced by the nursing group, as the minimum training requirement for general duty nursing is approximately 3 years. With respect to employment, approximately 65% of the participants were working either full-time or part-time. The remainder were either unemployed (approximately 12%), retired (approximately 12%) or working on a temporary/casual basis (approximately 11%). A further description of the sample by occupational classification is presented in Table 4.4.

The Health Subsample

Individuals in the health subsample ranged in age from 18 to 84, with an average age of approximately 42 years (SD=14.0). The ratio of females to males was approximately 3 to 1, with 76% being female and 24% being male. The majority of

Table 4.4

Description of the Total Sample (n=550) by Occupational Classification[a]

Occupation	**Frequency**[b]	**Percent**[b]
Health (including health care management)	230	41.8
Social Service/Education/Government	99	18.0
Business & Finance	57	10.4
Sales	42	7.6
Management (excluding health care)	17	3.1
Art & Culture	11	2.0
Science	10	1.8
Trades	6	1.1
Primary Industry/Processing/Manufacturing	6	1.1
Other, not applicable	42	7.6
Other, missing data	30	5.5
TOTAL	550	100.0

[a] Occupational classification is based on the *Standard Occupational Classification* (1991) system.

[b] Frequencies and percentages represent all levels of employment status, including full-time/part-time employment, unemployment, retirement and temporary/casual employment.

individuals in this subsample were married (approximately 58%); the remainder were either single, divorced, separated or widowed. Approximately 82% of the individuals had advanced training beyond high school level, with an average of 3.6 years (SD=2.7). With respect to employment status, 67% of the participants were working either full-time or part-time.

The Illness Subsample

The average age of individuals in the illness subsample was approximately 49 years (SD=15.1), with a range of 18 to 79. With respect to gender, the female to male ratio was 3 to 1: 76% of the individuals in this subsample were women and 24% were men. The majority of individuals were married (approximately 60%), while the remainder were either single, divorced, separated or widowed (approximately 40%). Most individuals (i.e. 80%) had received post-secondary education, averaging approximately 4.1 years of advanced training (SD=3.0). Approximately 48% of the people were working either full-time or part-time.

The illness subsample represented a diversity of illness experiences, ranging from chronic to serious to life-threatening illnesses. Although the exact stage of the illness was not possible to determine, some inferences could be made from the participants' health status. Approximately three quarters of the participants rated their health within the range of *good to excellent*. The remaining 25% rated their health as either *fair or poor*. Generally, this subsample included individuals at different stages of the illness experience. Some were in remission or had completely recovered from their illness. Others had controllable conditions, while still others had progressive illness. With respect to the types of illness, approximately 25% of the participants had some form of cancer. The remaining 75% represented illnesses other than cancer. Some participants had experience with only one type of illness, while others had multiple illness experiences.

The Nursing Subsample

The average age of the nursing subsample was approximately 38 years (SD=11.5), with a range from 19 to 63 years. The gender distribution was predominantly female (97%). The majority of individuals in this subsample were married (61%), while the remainder were either single, divorced, separated or widowed (39%). All individuals had received education beyond the high school level, with an average of approximately 4 years of advanced training (SD=1.6). The number of years of health care experience ranged from 0 (for student nurses in training) to 40, with an average of approximately 14 years (SD=9.8). A wide range of clinical experiences, within both hospital and community settings, were represented, as summarized in Table 4.5. Student nurses comprised approximately 24% of the sample, while practising nurses comprised the remaining 76%.

Preface to the Next Three Chapters

Two primary research questions were outlined in the Introduction to this study. The first question was theoretically-oriented, that is, *"What is the structure of hope, based on personal meaning?"* In contrast, the second question was clinically-oriented: *"Are there differences in the meaning of hope amongst individuals with different health and illness experiences?"* These two questions shaped the design and direction of this study.

The data analysis process can be linked to these two research questions. The first two phases of data analysis were designed to answer the first research question. A factor structure for the concept, *Hope,* was identified, refined and compared with existing theoretical frameworks. This refined structure was subsequently compared

Table 4.5

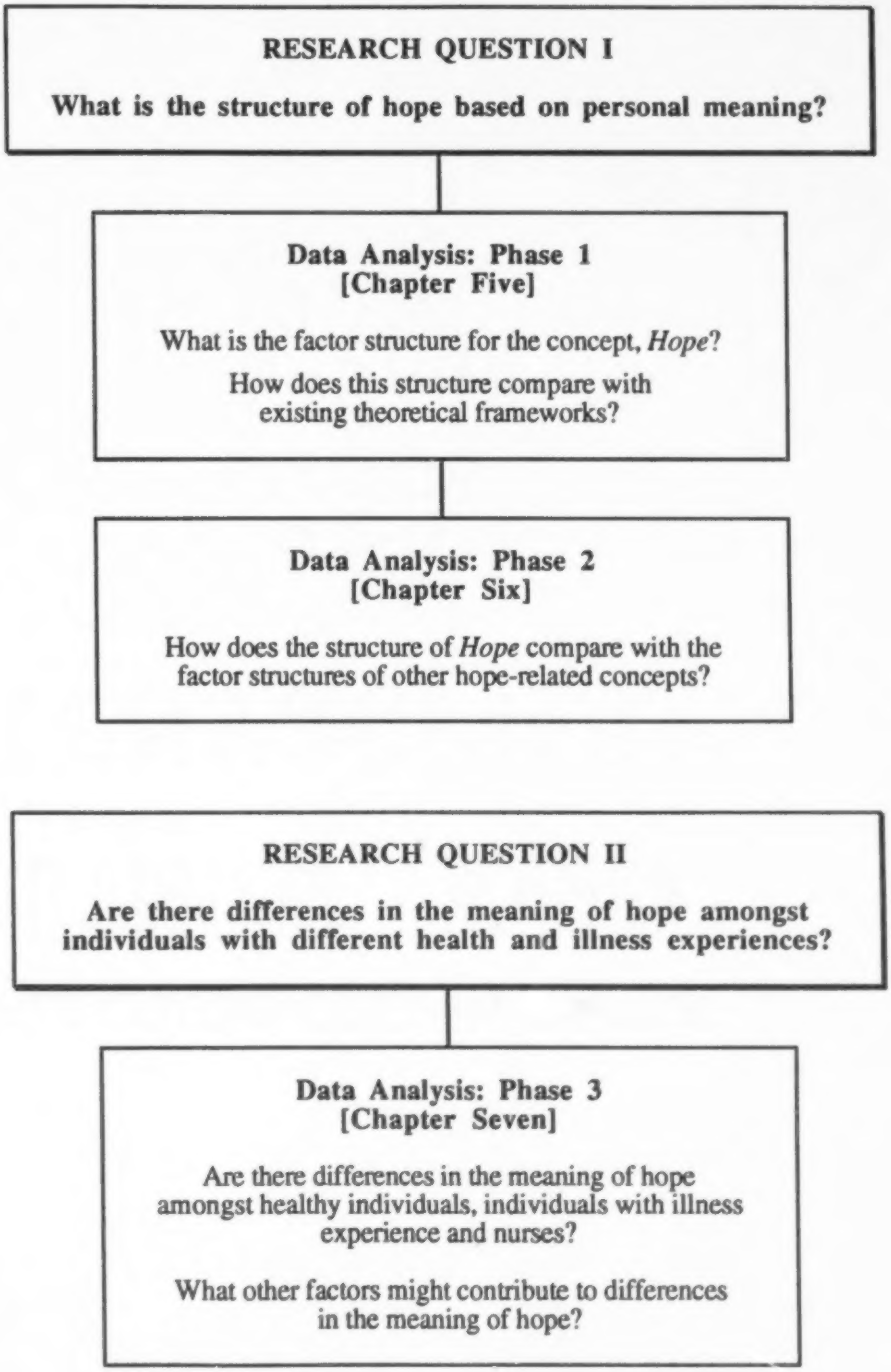
Description of the Nursing Subsample (n=206) Based on Clinical Experience

Clinical Experience	**Frequency**	**Percent**
Student Nurses		
• second year	23	11.2
• fourth year	27	13.1
Subtotal	50	24.3
Practising Nurses		
• public health and home care	32	15.6
• emergency medicine	18	8.7
• surgery	17	8.3
• geriatrics	17	8.3
• critical care	12	5.8
• medicine	11	5.3
• oncology	6	2.9
• mental health	4	1.9
• multiple clinical areas	20	9.7
• nonspecified	19	9.2
Subtotal	156	75.7
Total	206	100.0

with the structures of other hope-related concepts. The third phase of data analysis was designed to respond to the second research question. The primary goal of this third phase was to identify differences in personal meaning of hope, based on different health and illness experiences. Factor means were compared between and within the three subsamples of health, illness and nursing.

The findings from these three phases of data analysis will be presented in the next three chapters. Chapters Five and Six summarize the results relating to the first research question. In Chapter Five, a factor structure for the concept, *Hope,* will be presented. This structure will be compared with existing theoretical frameworks. In Chapter Six, the structure for *Hope* will be compared with other hope-related concepts. Chapter Seven presents a summary of the results relating to the second research question. In this chapter, the significant findings from the group comparisons of factor means will be presented. An overview of the next three chapters, highlighting the sequential approach to the data analysis process, appears in Figure 4.1.

Figure 4.1. Overview of the research questions and data analysis phases.



RESEARCH QUESTION I

What is the structure of hope based on personal meaning?

Data Analysis: Phase 1
[Chapter Five]

What is the factor structure for the concept, *Hope*?

How does this structure compare with existing theoretical frameworks?

Data Analysis: Phase 2
[Chapter Six]

How does the structure of *Hope* compare with the factor structures of other hope-related concepts?

RESEARCH QUESTION II

Are there differences in the meaning of hope amongst individuals with different health and illness experiences?

Data Analysis: Phase 3
[Chapter Seven]

Are there differences in the meaning of hope amongst healthy individuals, individuals with illness experience and nurses?

What other factors might contribute to differences in the meaning of hope?

CHAPTER FIVE

A FACTOR STRUCTURE FOR *HOPE*

The findings presented in this chapter respond to two underlying research questions: (a) "*What is the factor structure for the concept, Hope?*" and (b) "*How does this structure compare with existing theoretical frameworks?*" In this chapter, a factor structure for the concept, *Hope,* is presented. This structure was identified through a stepwise process of factor extraction, interpretation and refinement. To assist in this process, the factor structure for *Hope* was compared with Osgood and his associates' (Osgood & Suci, 1955; Osgood et al., 1957) original factor analysis of meaning. Subsequent comparisons were made with the hope model proposed by Dufault and Martocchio (1985).

Factor Extraction

The first step in isolating the factor structure for the concept, *Hope,* was to identify the number of significant factors. An initial factor analysis of correlations among the 50 scales (n=550), using the roots greater than one criterion, resulted in the extraction of ten factors, accounting for approximately 58% of the total variance. The first three extracted factors were prominent, accounting for approximately 40% of the total variance. The remaining factors did not contribute to a useful interpretation of the structure.

As a further screen for the number of significant factors, a scree test, which is a plot of the characteristic roots, was performed. The underlying rationale for the scree test is that a limited number of predominant factors are being accurately measured by the variables and thus, account for most of the variance. Numerous trivial, specific and error factors, which are smaller, are being less accurately measured by the variables. Thus, in a plot of the characteristic roots, the numerous smaller factors, with smaller characteristic roots, tend to form a line sloping slightly downward from horizontal.

The predominant factors do not form part of this straight line, as they are generally larger (Gorsuch, 1983). The results from the scree test, as shown in Figure 5.1, suggest that there are a minimum of three predominant factors. The fourth factor could also be considered a significant factor, based on the scree test. However, a rotated four-factor solution simply broke the third factor of the three factor structure into two parts and did not appear to contribute to a greater understanding of the structure of *Hope*.

The three factors were rotated to the varimax criterion and the results are shown in Table 5.1. Factor I is a dominant factor, accounting for approximately 31% of the total variance or 78% of the common variance. Factors II and III are considerably smaller, accounting for approximately 5% and 4% of the total variance, respectively.

The extraction of three primary factors, with a predominant first factor, resembles Osgood's factor analysis of meaning (Osgood & Suci, 1955; Osgood et al., 1957). In their original factor analytic work, four factors were extracted. The first three factors accounted for approximately 48% of the total variance or 97% of the common variance. Since the fourth factor accounted for a very small percentage of the total variance (i.e. 1.52%), they deleted it, leaving three primary factors. Of the three factors, Osgood's first factor was dominant, accounting for 69% of the common variance.

A comparison of factor variances between the concept, *Hope,* and Osgood's factor analysis of meaning (Osgood & Suci, 1955; Osgood et al., 1957) appears in Table 5.2. As shown in this table, both first factors are dominant, accounting for the largest proportion of the total variance. Factors II and III for the concept, *Hope,* account for a slightly smaller percentage of the total variance than Osgood's Factors II and III. Further, the total variance accounted for by the three *Hope* factors (approximately 40%), is slightly less than the 48% accounted for by Osgood's three factors.

Figure 5.1 Scree Plot for HOPE

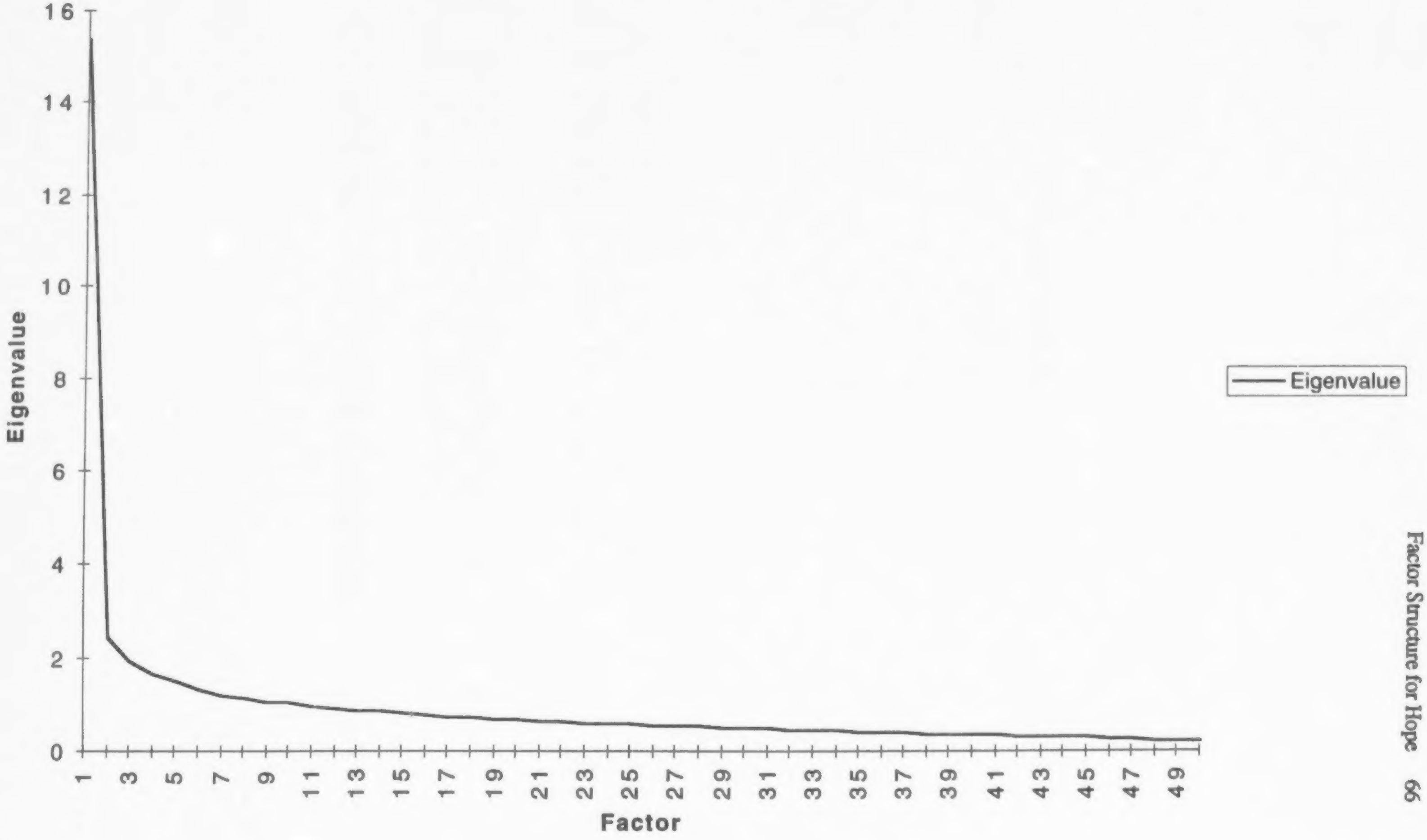


Table 5.1. Orthogonally Rotated Factor Loadings for the Concept, *Hope* (50 scales, n=550)

VARIABLES+	**LOADINGS**		
	Factor I	**Factor II**	**Factor III**
meaningful	.70	**	**
empowering	.70	**	**
valuable	.69	**	**
desirable	.67	**	**
enhancing	.66	**	**
essential	.65	**	**
bright	.63	**	**
opening	.62	**	**
forward	.59	.33	**
good	.59	**	.30
strong	.58	.43	**
caring	.56	**	**
helpful	.55	**	.35
possible	.53	.30	**
active	.52	**	**
winning	.52	**	**
light (dark)	.51	**	.43
aware	.49	.48	**
colorful	.49	**	**
positive	.48	**	**
joining	.47	.37	**
free	.44	**	.34
broad	.44	**	**
believable	.43	.31	.40
probable	.42	.34	**
daring	.41	**	**
light (heavy)	.40	**	.30
optimistic	.39	**	**
leading	.34	**	**
confronting	.32	**	**
precise	**	.66	**
near	**	.65	**
perfect	**	.63	**
certain	.33	.63	**
stable	.37	.58	**
expected	**	.57	**
fearless	**	.56	**
fast	**	.55	**
confident	.43	.45	**
patient	.30	.35	**
outward	**	**	**
honest	**	**	.73
trusting	**	**	.68
realistic	**	**	.63
tender	**	**	.60
happy	.35	**	.47
connected	.34	**	.45
warm	.37	**	.43
accepting	**	.34	.43
soft	**	**	**
% of total variance	30.8	4.9	3.9
% of common variance	77.8	12.4	9.8

+ Some of the adjective pair scales were randomly reversed in polarity for the Hope Research Study, but for convenience of comparison the signs have been changed to make them consistent.

** Less than .30 in absolute value.

Table 5.2

Comparison of Factor Variances Between Factor Analysis of the Concept *Hope* (50 variables, n=550) and Osgood's Factor Analysis of Meaning (Osgood & Suci, 1955)

FACTOR	HOPE		OSGOOD	
	Total Variance(%)	Common Variance(%)	Total Variance(%)	Common Variance(%)
I	30.8	77.8	33.78	68.55
II	4.9	12.4	7.62	15.46
III	3.9	9.8	6.24	12.66
Total	39.6	100.00	47.64	96.67

The comparison of factor variances between the hope-related concepts and Osgood's original work (Osgood & Suci, 1955; Osgood et al., 1957) may change, as further concepts are added to the analysis. Osgood et al. designed their original study using 20 different concepts, that were essentially unrelated. In the Hope Research Study, six distinctive, yet inter-related concepts were used. If the six hope-related concepts are perceived in a similar fashion, then, as further concepts are added, Factor I should become very dominant.

Factor Interpretation

The three primary factors extracted from the concept, *Hope,* were interpreted using the orthogonal rotation. There were three reasons for selecting this rotation for interpretation. First, regardless of whether an orthogonal or oblique rotation was applied, a similar pattern of variable loadings across the three factors emerged. Second, although the oblique pattern matrix had the purest loadings of the three rotated matrices, the interpretation of this matrix was not any clearer than that of the orthogonally rotated factor matrix. Third, the findings from Osgood et al.'s (Osgood & Suci, 1955; Osgood et al., 1957) original factor analytic work were based on orthogonally rotated factors.

The interpretation of the three factors, which follows, is based on the rotated factor matrix appearing in Table 5.1. For ease of interpretation, each scale is represented by the adjective which best characterizes the concept, *Hope*. For consistency, the signs on the factor loadings for some of the variables have thus been reversed. A complete listing of the adjective pair scales, as they appeared in the instrument, is included in the questionnaire (see Appendix C). Given the large number of variables with loadings on Factor I, a factor loading of $|.50|$ or better was used for interpretation purposes. As there were fewer variables that loaded on Factors II and III, loadings of $|.40|$ or better were used for the interpretation. Loadings as low as .30 are shown in Table 5.1 so that factor overlap can be detected. The entire factor matrix, including loadings below .30, appears in Table G.1, Appendix G.

Interpretation of Factor I

The variables loading on Factor I were initially divided into two components, specifically, an *evaluative* component and a *personal hope* component, consisting of *subjective* elements of hope. Subsequently, the correlation matrix for the adjective pair scales was examined and clusters of variables with high correlations were identified. These clusters assisted in the selection of eight variables to represent Factor I.

The variables with the highest loadings on Factor I could be classified as *evaluative* variables. The following variables had loadings of .65 or better: *meaningful, empowering, valuable, desirable, enhancing* and *essential.* Two additional variables, *good* and *helpful,* which are also evaluative, had loadings between .5 and .6. Although the variables, *meaningful, empowering* and *enhancing,* were initially classified as evaluative variables, they could also be considered as *subjective hope* elements.

Factor I appears to have a significant *evaluative* component, which is similar to Osgood's findings (Osgood & Suci, 1955; Osgood et al., 1957). Three variables, specifically, *valuable-worthless, good-bad* and *honest-dishonest,* were used as markers for Osgood's *evaluative* factor. A comparison of factor loadings of these three marker variables, between the concept, *Hope,* and Osgood's original work, appears in Table 5.3. Two of the evaluative markers, *valuable-worthless* and *good-bad,* had factor loadings above .5 on Factor I. Although these loadings are not quite as high as the loadings from Osgood's original work, these findings support the presence of an evaluative component on Factor I. It is important to note, however, that the third evaluative marker, *honest-dishonest,* did not significantly load on the first factor.

Table 5.3

Factor Loadings of Adjective Pair Markers for the Concept, *Hope* (50 variables, n=550), and Osgood's Factor Analysis of Meaning (Osgood & Suci, 1955)

Adjective Pair Markers[a]	**Loadings [HOPE]**[a]			**Loadings [Osgood]**[a]		
	I	**II**	**III**	**I** *(eval)*	**II** *(potency)*	**III** *(activity)*
Evaluative						
good-bad	.59	.14	.30	.88	.05	-.09
honest-dishonest	.09	.13	.73	.85	.07	-.02
valuable-worthless	.69	.09	.16	.79	.04	.13
Potency						
light-heavy	.40	.26	.30	.36	-.62	.11
strong-weak	.58	.43	.01	.19	.62	.20
soft-hard	.06	.11	.26	.48	-.55	-.16
Activity						
fast-slow	-.09	.55	.06	.01	.00	.70
active-passive	.52	.22	.17	.14	.04	.59
hot-cold[b]	.37	-.02	.43	-.04	-.06	.46

[a] All adjective pair scales are presented in a positive polarity, with respect to the concept, *Hope*, for consistency and ease of interpretation. The signs on the loadings have been changed accordingly.
[b] The adjective pair, *hot-cold*, used in Osgood's original work, was changed to *warm-cold*, for the Hope Research Study.

Although Factor I appears to be similar to Osgood's *evaluative* factor (Osgood & Suci, 1955; Osgood et al., 1957), there are some significant differences. Contrary to Osgood et al.'s findings, Factor I is not purely evaluative. This first factor is also comprised of variables representing the subjective elements of hope. The subjective hope variables, with loadings above .50, included *bright, opening, forward, strong, caring, possible, active, winning* and *light(dark).* Two of these variables, specifically, *strong* and *active,* are also markers for Osgood's *potency* and *activity* factors, respectively. If Factor I were purely evaluative, then these two markers should not have loaded most highly on the first factor.

Due to the large number of variables loading on Factor I, the correlation matrix for the 50 adjective pairs was examined further. A comparison of correlations amongst the adjective pairs revealed a number of variable clusters which correlated highly with one another. Based on this analysis, a central cluster was identified, specifically, *meaningful-bright-valuable-desirable,* in which the variable, *meaningful,* formed the core. Other variables were attached to this central cluster: Some were evaluative in nature, like *empowering, enhancing* and *good*; while others were descriptive qualities of hope, such as, *strong, caring* and *forward.*

Based on this cluster analysis, eight variables were selected to represent Factor I: *meaningful, bright, valuable, desirable, empowering, strong, caring* and *forward.* The correlations amongst these eight variables appear in Table 5.4. As shown in this table, the four variables comprising the central cluster correlate with one another above .45. The remaining four variables correlate above .45 with some, but not all, of the central variable cluster. The variable, *meaningful,* which forms the core of the central cluster, has a correlation of .47 or better with each of the other variables.

Table 5.4

Correlations of the Eight Variables Selected to Represent Factor I

	meaning	bright	desirable	valuable	forward	caring	strong	empower
meaning	1.00	.50	.47	.54	.48	.49	.50	.59
bright	.50	1.00	.52	.47	.49	.51	.47	(.44)
desirable	.47	.52	1.00	.50	.46	.48	(.37)	.52
valuable	.54	.47	.50	1.00	.50	.49	(.43)	(.40)
forward	.48	.49	.46	.50	1.00	(.45)	.48	(.43)
caring	.49	.52	.48	.49	(.45)	1.00	.47	(.41)
strong	.50	.47	(.37)	(.43)	.48	.47	1.00	(.42)
empower	.59	(.44)	.52	(.40)	(.43)	(.41)	(.42)	1.00

Note. All correlations are significant at the level of $p<.01$. Numbers in parentheses are correlations equal to or less than .45.

Factor I primarily focuses on the *personal* dimension of *Hope.* The eight variables selected to represent Factor I may be interpreted as subjective hope components, characterized by the following hope-related themes: (a) *meaning,* represented by the core variable, *meaningful;* (b) *vibrancy,* represented by the variables, *bright* and *strong;* (c) *engaging,* represented by the variables, *empowering* and *forward;* (d) *caring,* represented by the variable, *caring;* and (e) *value,* represented by the variables, *valuable* and *desirable.* Based on this interpretation, Factor I may be best described as a *personal spirit* factor.

Interpretation of Factor II

Factor II is predominantly a *predictability* factor, which is reflected in the following variables: *precise, near, perfect, certain, stable* and *expected.* All of these variables had factor loadings above .55. Underpinning the theme of predictability is a second prominent theme of *boldness,* represented by the variables, *fearless, fast* and *confident.* This link between predictability and boldness is further supported by the high correlation between the two variables, *certain* and *confident* (r=.61).

Factor II bears some resemblance to Osgood's third *activity* factor (Osgood & Suci, 1955; Osgood et al., 1957). The adjective pair scales, *fast-slow, active-passive* and *warm-cold,* were used as markers for the activity factor. As shown in Table 5.3, only one of these markers, that is, *fast-slow,* loaded on Factor II. The other two markers, *active-passive* and *warm-cold,* had the highest loadings on Factors I and III, respectively. Thus, Factor II is not purely an activity factor. Although activity may be a component of this second factor, it is in relationship to the themes of *predictability* and *boldness.*

Eight variables were selected to represent Factor II, specifically, *precise, near, certain, stable, expected, fearless, fast* and *confident.* The selection of variables for

Factor II was based on factor loadings, as well as the number of variables representing the *predictability* and *boldness* components of this factor. Nine variables with loadings above .40 were initially considered. Of these nine, six variables represented the *predictability* component and three represented the *boldness* component. Given this disproportionate representation of the two components, one of the predictability variables was deleted. The two *predictability* variables that correlated most highly with one another, that is, *certain* and *perfect,* were identified and an arbitrary decision was made to delete the variable, *perfect.*

Factor II is predominantly a *situational* factor, revolving around the theme of *predictability.* However, it also has an important *personal* component, highlighted by the theme of *boldness.* The two themes of *predictability* and *boldness* are directly related: that is, the greater the predictability of a situation, the greater an individual's boldness. The opposite is also true. As a situation becomes less predictable, the individual would be less confident or bold. Integrating these two themes, Factor II is best described as a *risk* factor.

Interpretation of Factor III

Factor III has a predominant *credibility* component, which is reflected in the variables with the highest loadings on this factor (r >.6): *honest, trusting* and *realistic.* These same three variables correlated with one another above .50. Underlying this credibility component is a *comfort* component, represented by the variables *tender, happy, connected, warm* and *accepting.*

Two of the variables on Factor III resemble Osgood's *potency* factor (Osgood & Suci, 1955; Osgood et al., 1957). These are *tender-tough* and *soft-hard.* Three adjective pair markers had been preselected to represent the potency factor: *light-heavy, strong-weak* and *soft-hard.* As depicted in Table 5.3, none of these three variables loaded significantly on Factor III. The first two markers had their highest loadings on Factor I. Although the third marker, *soft-hard,* had the highest loading on Factor III, this value was below |.30|. The variable, *tender-tough,* which could be considered a measure of potency, did load significantly on Factor III. However, this variable more accurately reflects the *comfort* component of this factor, as opposed to potency. Thus, Osgood's concept of potency is not a prominent component of Factor III.

Factor III focuses on the *interpersonal* dimension of *Hope*, which is reflected in the eight variables selected to represent this factor, specifically, *honest, trusting, realistic, tender, happy, connected, warm* and *accepting*. These variables were selected, as they had the highest loadings on Factor III. This factor has a predominant *credibility* component, complemented with an underlying *comfort* component. Factor III is best described as an *authentic caring* factor.

Summary

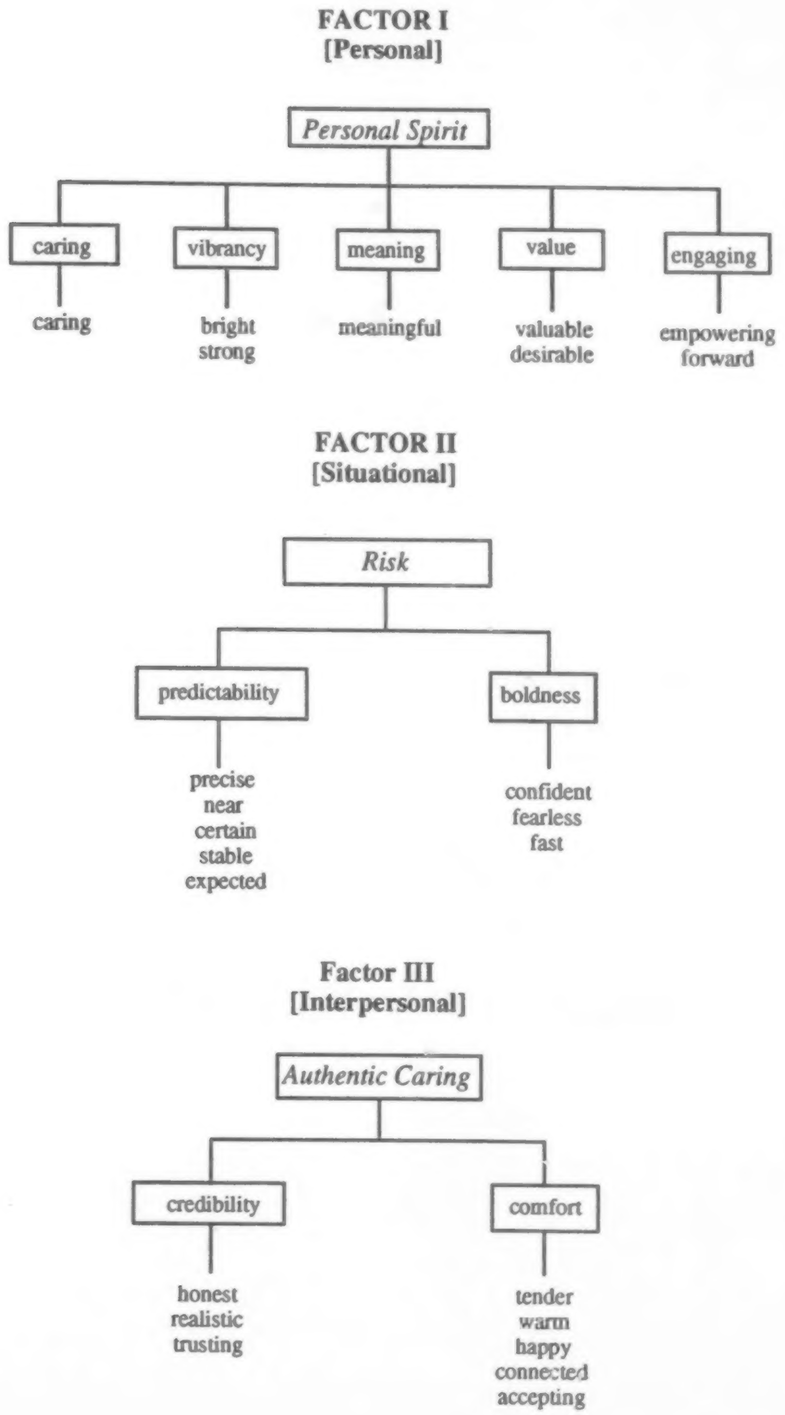
Four key findings emerged from the factor analysis of the concept, *Hope*. A summary of these key findings appears in Figure 5.2.

(a) Three primary factors were extracted. Factor I is a significantly large, dominant factor. Factors II and III are considerably smaller than the first factor.

(b) Factor I is a *personal* factor, focusing on the uniqueness of individual experience. It has a substantial *evaluative* component. However, it also has a prominent *personal hope* component, centered around a core theme of *meaningfulness.* This factor is best represented by eight variables, *meaningful-bright-valuable-desirable-empowering-strong-caring-forward.* Factor I may be most aptly described as a *personal spirit* factor.

(c) Factor II predominantly focuses on the *situational* dimension of *Hope*. However, it also has a related *personal* element. Factor II is primarily a *predictability* factor,

Figure 5.2. Summary of the key findings from the factor analysis of the concept, *Hope*.



targeted with an underlying *personal* component of *boldness*. The variables, *precise-near-certain-stable-expected-fearless-fast-confident,* represent this factor. Factor II is best characterized as a *risk* factor.

(d) Factor III centres around the *interpersonal* dimension of *Hope.* It has a predominant *credibility* component, strongly linked with the theme of *comfort.* Eight variables best represent this factor, specifically, *honest-trusting-realistic-tender-happy-connected-warm-accepting.* Factor III may be described as an *authentic caring* factor.

A comparison of the factor analysis of the concept, *Hope,* with Osgood's original factor analysis of meaning (Osgood & Suci, 1955; Osgood et al., 1957) revealed some similarities, as well as some differences. The extraction of three primary factors, with a predominant first factor was similar to Osgood's findings. In contrast, the three factors for the concept of *Hope* did not distinctly resemble Osgood's three factors of *evaluation, potency* and *activity.* Although the first factor for *Hope* had a significant *evaluative* component, it was not purely evaluative. This factor also had a significant *personal hope* component, revolving around the theme of *meaningfulness.* Factor I was best described as a *personal spirit* factor. Factor II partially resembled Osgood's *activity* factor. However, it was more accurately depicted as a *risk* factor, supported by the themes of *predictability* and *boldness.* Factor III did not resemble Osgood's *potency* factor. It was depicted as an *authentic caring* factor, characterized by the themes of *credibility* and *comfort.*

Factor Structure Refinement

Based on the factor interpretation, the initial factor structure for the concept, *Hope,* was refined. The original pool of 50 variables was reduced to 24 variables, with eight variables representing each of the three factors. As shown in Table 5.5, the eight

Table 5.5

Variable Selection for the Refined Factor Structure of the Concept, *Hope*

Factor	**Variables**
Personal Spirit	meaningful bright valuable desirable empowering strong caring forward
Risk	precise near certain stable expected fearless fast confident
Authentic Caring	honest trusting realistic tender happy connected warm accepting

variables that best represent each of the factors were selected. The rotated factor matrix, based on these 24 variables, appears in Table 5.6. For ease of interpretation, factor loadings below .30 are not included in this table. For a closer examination of the statistics, however, the entire factor matrix for *Hope*, based on 24 variables, appears in Table G.2, Appendix G. As shown in Table 5.6, the eight variables, representing each of the three factors, selectively loaded on their respective factors. The loadings on Factor I were above .60. The loadings on Factors II and III were slightly lower for some of the variables. The consistent loading of variables on their respective factors, however, gives further support to the refined factor structure for the concept, *Hope.*

As also shown in Table 5.6, some of the variables did not differentiate well, having similar loadings on two or three of the factors, specifically, *stable, confident* and *happy.* The variable, *stable,* loaded significantly on Factors I and II, while *confident* and *happy,* loaded on all three factors. Based on these loadings, it may be inferred that *stability* is a common element of Factors I and II, while *confidence* and *contentment* may be underlying features of all three factors. However, the significance of these loadings should be interpreted with caution.

Comparison with Osgood's Findings

The initial design of the hope research tool incorporated Osgood's (Osgood & Suci, 1955; Osgood et al., 1957) framework for semantic meaning. Nine adjective pair markers, representing the three factors of *evaluation, potency* and *activity,* were included in the original pool of 50 variables (see Appendix A). If the refined structure for *Hope* were similar to Osgood's framework, then the markers should load on their respective factors: the *evaluative* markers, *good, honest* and *valuable,* should load on Factor I; the *potency* markers, *light (heavy), strong* and *soft,* should load on Factor II;

Table 5.6

Orthogonally Rotated Factor Loadings of the Refined Factor Structure for the Concept, *Hope* (24 variables, n=550)

VARIABLES[a]	LOADINGS[a]		
	Factor I	Factor II	Factor III
meaningful	.78	**	**
empowering	.73	**	**
desirable	.73	**	**
valuable (E)*	.72	**	**
bright	.69	**	**
caring	.68	**	**
strong (P)*	.65	.35	**
forward+	.64	**	**
precise	**	.70	**
near+	**	.64	**
expected	**	.63	**
fast (A)*	**	.62	**
certain+	.34	.61	**
fearless+	.39	.53	**
stable	.46	.48	**
confident	.40	.47	.33
honest (E)*	**	**	.82
trusting	**	**	.79
realistic+	**	**	.72
tender	**	**	.53
warm (A)*	**	**	.49
happy+	.32	.35	.45
connected+	**	**	.44
accepting	**	.31	.39
Total Variance(%)	33.4	8.4	7.4
Common Variance(%)	67.9	17.1	15.0

[a] Some of the adjective pair scales were randomly reversed in polarity for the Hope Research Study, but for convenience of comparison the signs have been changed to make them consistent.
*Adjective pair markers for Osgood's three factors: E (evaluation), P (potency) and A (activity).
+Adjective pair markers for Dufault and Martocchio's (1985) model of hope.
**Less than .30 in absolute value.

and the *activity* markers, *fast, active* and *warm,* should load on Factor III. As shown in Table 5.6, only five of the nine markers had significant loadings for the refined *Hope* structure. Not only were there fewer markers, the pattern of loadings was not as predicted.

To further understand the relationship between the refined factor structure of *Hope* and Osgood's framework (Osgood & Suci, 1955; Osgood et al., 1957), the factor means for the concept, *Hope* were correlated with the factor means for the adjective pair markers, representing Osgood's three factors. The factor means were calculated for each person by averaging their ratings over the scales defining each factor. Correlations were then calculated over people. The factor means for *Hope* were derived from the refined factor structure, consisting of the reduced pool of 24 variables. The factor means for Osgood's work were derived from the 9 variables, preselected as markers for Osgood's three factors.

The correlation matrix for the factor means is presented in Table 5.7. Factor I for *Hope* correlated most highly with Osgood's (Osgood & Suci, 1955; Osgood et al., 1957) *evaluative* factor, which offers some support for an evaluative component for Factor I. The two factors both include the marker, *valuable,* as one of their defining scales, and so the size of the correlation partly reflects this common element. Factor I also correlated highly with Osgood's *potency* factor, suggesting that this factor is not purely evaluative. However, again, the two factors had the scale, *strong,* in common. Factor II for the concept, *Hope,* correlated most highly with Osgood's *activity* factor, in spite of the fact that only one of the activity markers (i.e. *fast-slow)* loaded on this factor. This suggests that there may be a significant activity component for Factor II. However, this activity component may be interpreted within the context of the predominant themes of this factor, specifically, *predictability* and *boldness.* The third

Table 5.7

Correlations of Factor Means Based on Osgood's Framework and the Concept, *Hope* (24 variables, n=550)

	OSGOOD			HOPE		
	Eval	Potency	Activity	I	II	III
Eval	1.00					
Potency	.44	1.00				
Activity	.43	.37	1.00			
Hope I	.65 (1)*	.61 (1)*	.47	1.00		
Hope II	.45	.52	.62 (1)*	.58	1.00	
Hope III	.74 (1)*	.47	.52 (1)*	.52	.55	1.00

Note. All correlations are significant at the level of $p<.01$

* Numbers in parentheses indicate the number of adjective scales that the two factor structures have in common.

factor for *Hope* correlated only moderately with Osgood's *potency* factor, supporting the view that potency is not a significant component of Factor III. Interestingly, Factor III correlated most highly with the evaluative factor. This may be related to the fact that some of the variables on Factor III could also be classified as evaluative variables, specifically, *honest* (a marker for Osgood's *evaluative* factor), *realistic, trusting* and *happy*.

Comparison with Dufault and Martocchio's Hope Framework

In addition to Osgood's framework (Osgood & Suci, 1955; Osgood et al., 1957), the Hope Model proposed by Dufault and Martocchio (1985) was also integrated within the initial design of the research tool. Sixteen adjective pair markers, representing six dimensions of hope, were included in the original pool of 50 variables (see Appendix A). Of these 16 adjective pairs, only 7 markers had significant loadings for the refined *Hope* structure, as shown in Table 5.6. The pattern of loadings for these markers was diffuse. The six dimensions of hope, proposed by Dufault and Martocchio, were not delineated by these markers.

There are some notable differences between the factor structure for *Hope* and Dufault and Martocchio's (1985) Hope Model. Three factors of *personal spirit, risk and authentic caring* defined the *Hope* structure. These three factors differed qualitatively from the six dimensions of the Hope Model. Dufault and Martocchio graphically represented the dimensions of hope as six equal components (see Figure 5.3). In contrast, the three factors for the structure for *Hope* were not equal in terms of the total amount of variance accounted for by each factor. Of the three factors, the *personal spirit* factor was predominant. This personal spirit factor represented hope as a holistic, interconnected configuration of different hope elements. These included meaning, vibrancy, value, caring and energy. Unlike Dufault and Martocchio's

Figure 5.3. The spheres and dimensions of Dufault and Martocchio's (1985) Hope Model.[a]

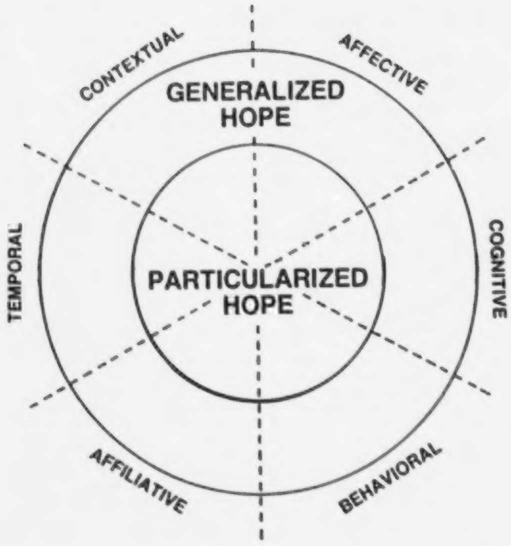


Figure 1. Spheres and dimensions of hope.

[a] From "Hope: Its Spheres and Dimensions," by K. Dufault and B. C. Martocchio, 1985, *Nursing Clinics of North America, 20(2)*, p. 382. Copyright 1985 by W. B. Saunders Company. Reprinted with permission.

conceptualization of hope, these elements were intricately interconnected and could not be compartmentalized. Rather, they were configured within a single dimension of personal spirit (see Figure 5.4).

In addition to the *personal spirit* factor, comparisons may also be drawn between the *risk and authentic caring* factors for *Hope* and Dufault and Martocchio's (1985) Hope Model. The *risk* and *authentic caring* factors bear some resemblance to the behavioral and affiliative dimensions for the Hope Model. The *boldness* component of the *risk* factor is activity-oriented, which is similar to the behavioral hope dimension. However, it is complemented with a substantial *predictability* component that is absent from Dufault and Martocchio's framework. The *authentic caring* factor resembles the affiliative hope dimension, as they both place a strong emphasis on relationships. However, there is a substantial *credibility* component within the *authentic caring* factor which is absent from the Hope Model. The importance of credibility within a caring relationship is not addressed by Dufault and Martocchio.

Summary

A factor structure for *Hope,* based on connotative or personal meaning, was identified. Three factors, specifically, *personal spirit, risk* and *authentic caring,* were extracted. These factors did not resemble Osgood et al.'s (Osgood & Suci, 1955; Osgood et al., 1957) semantic differential framework of evaluation, potency and activity. This factor structure also differed substantially from Dufault and Martocchio's (1985) Hope Model. A number of key themes emerged from the findings:

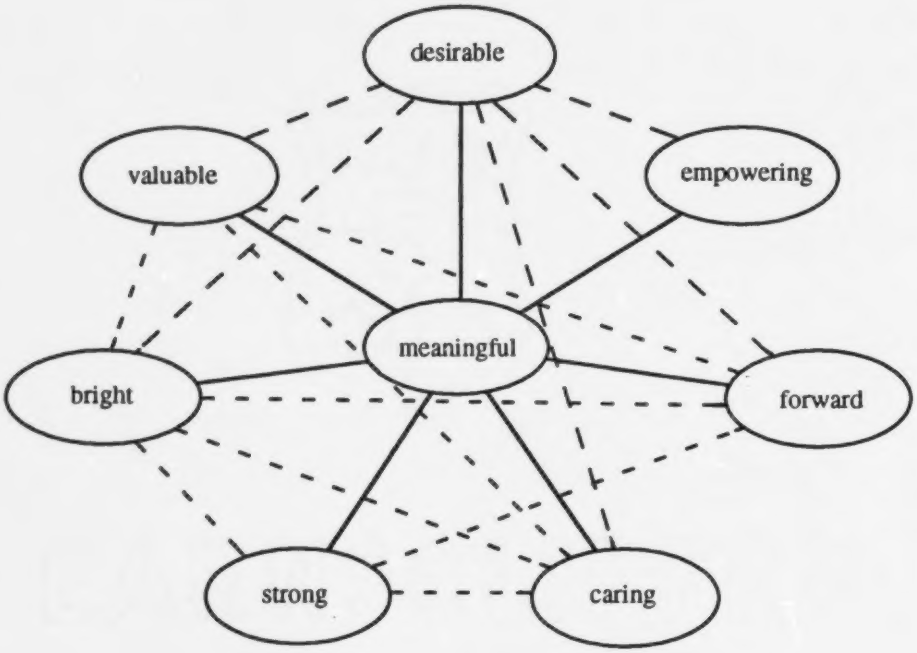
(a) the conceptualization of hope as a *holistic, interconnected configuration,* characterized by *personal spirit, risk* and *authentic caring;*

(b) the predominance of *personal spirit,* with a core element of *meaning*;

(c) the importance of *predictability* or *uncertainty* as an element of *risk;* and

(d) the interconnection between *credibility* and *caring,* as elements of *authentic caring.*

Figure 5.4. A holistic configuration of the *personal spirit* factor for the concept, *Hope.*



Note. Solid lines represent correlations above .45 for the variable, *meaningful.* Broken lines represent correlations above .45 for all other variables, other than the variable, *meaningful.*

CHAPTER SIX

A COMPARISON OF HOPE-RELATED CONCEPTS

The findings presented in this chapter respond to the underlying research question, *"How does the structure of Hope compare with the factor structures for the other hope-related concepts?"* In this chapter, two approaches were used for the comparison of the hope-related concepts. First, factor means were compared amongst the six concepts, *Hope, A Hopeful Person, A Person without Hope, Dave's Story, Karen's Story* and *A Personal Story of Hope*. Second, the factor structure for *Hope* was compared with the factor structures for the remaining concepts. Using the factor structures derived from the varimax rotation, factor variances, factor loading patterns and factor themes were compared amongst the concepts. To assist in the comparisons, an orthogonal Procrustes procedure (Schonemann, 1966) was used. The Procrustes procedure is an orthogonal rotation of a matrix to provide a least squares fit of a target structure. In the present case, the structure of *Hope* was taken as the target, and each of the other five structures were rotated to see if they could be "forced" into congruence with *Hope*.

Comparison of Factor Means

In this first comparison, factor means were compared across the six hope-related concepts. The factor means for each of the concepts appear in Table 6.1. Due to scoring procedures, raw scores ranged from 1 to 7: scores below 4.0 represented the positive end of the scale, scores above 4.0 represented the negative end of the scale and a score of 4.0 was neutral. Thus, factor means below 4.0 represent the positive end of the continuum, while means above 4.0 represent the negative end of the continuum.

A three-dimensional mapping of the hope-related concepts is represented in a plot of factor means (see Figure 6.1). For this three-dimensional plot, the scale for the factor means has been changed. The scores ranging from 1 to 7 have been converted to scores ranging from +3 to -3. Factor means within the range of 0 to +3 have been

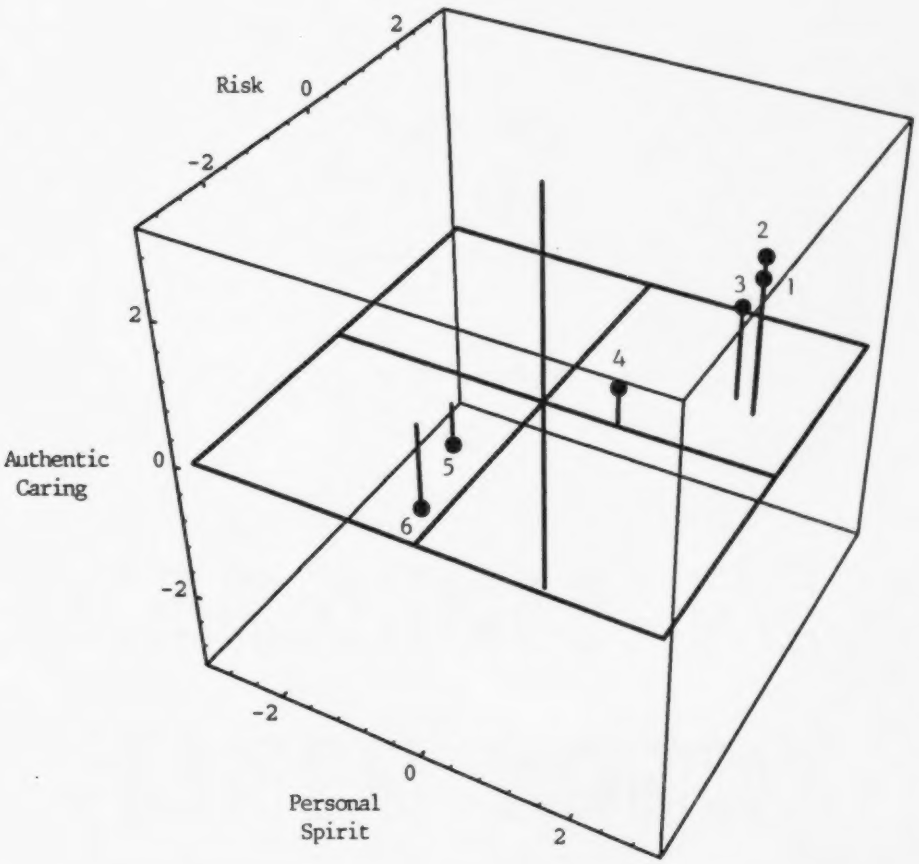
Table 6.1

Factor Means, Standard Deviations and Distance from *Hope* for the Six Hope-Related Concepts

Concept	**Personal Spirit**		**Risk**		**Authentic Caring**		**Distance from *Hope* (D)**
	M	SD	M	SD	M	SD	
Hope	1.71	.75	3.03	.97	2.13	.82	.00
Hopeful Person	1.81	.74	2.71	.84	2.03	.75	.35
Dave's Story (story of hope)	1.98	.92	2.83	.97	2.68	1.02	.64
Personal Story of Hope	2.98	1.70	3.94	1.38	3.45	1.50	2.04
Combined Concepts	3.09	.50	3.72	.47	3.40	.47	—
Karen's Story (losing hope)	4.96	1.20	4.58	.92	4.61	1.01	4.37
Person without Hope	5.12	.93	5.13	.85	5.29	.89	5.10

Note. Due to scoring procedures, factor means below 4.0 represent the positive end of the continuum and factor means above 4.0 represent the negative end of the continuum.

Figure 6.1. A comparison of factor means for the six hope-related concepts.



Key: 1 - *Hope*
2 - *A Hopeful Person*
3 - *Dave's Story* (A Story of Hope)
4 - *A Personal Story of Hope*
5 - *Karen's Story* (A Story of Losing Hope)
6 - *A Person Without Hope*

plotted along the positive end of each axis, while means within the range of 0 to -3 have been plotted along the negative end. The origin is represented by the midpoint for the factor means, (0,0,0). For each concept, the base of the projection represents the means for the *personal spirit* and *risk* factors. The length of the projection, from the concept to the base represents the mean for the *authentic caring* factor, with a projection above the horizontal plane indicating a rating toward the positive end of the axis and a projection below the plane indicating a rating toward the negative end of the axis.

As shown in Figure 6.1, three of the concepts occupy similar positions in the three-dimensional semantic space, *Hope, A Hopeful Person* and *Dave's Story*. These three concepts are located in close proximity to one another, above the upper right quadrant of the horizontal plane, in a region that represents the positive end of the continuum for each of the three factors. The close proximity of these three concepts in semantic space further supports their common features.

The concept, *A Personal Story of Hope,* is located close to the origin, slightly above the horizontal plane and to the right of the vertical axis. In retrospect, the close proximity of this concept to the origin is not surprising, as this concept represents both the positive and negative ends of the continuum: some of the participants rated their personal stories of hope positively, while others rated their stories negatively. Thus, the means of these combined ratings would be close to a neutral position, the origin.

Two of the concepts, *A Person without Hope* and *Karen's Story,* are located below the lower left quadrant of the horizontal plane, in close proximity to each other, in the region defined by the negative end for each of the three factors. Their close proximity illustrates the conceptual similarity between *A Person without Hope* and *Karen's Story.* Their position in the three-dimensional space is almost as far away from *Hope* as is possible.

Comparison of Factor Structures

To further understand the nature of the relationships amongst the concepts, an indepth comparison of factor structures was conducted. Factor structures were identified for the remaining five concepts, using the 24 *Hope* markers of *personal spirit, risk* and *authentic caring*. The five rotated factor structures appear in Tables G.3 to G.7, Appendix G. These structures were interpreted and compared with the structure for *Hope* in three different ways. First, the factor variances were compared across the six hope-related concepts. This was followed by a more detailed analysis of the factor structures, resulting in the identification of factor loading patterns for each of the concepts. The third method involved the identification and comparison of factor themes.

Comparison of Factor Variances

The factor variances for the six hope-related concepts appear in Table 6.2, ordered in terms of each concept's relative distance from *Hope*. As shown in this table, the distribution of factor variances for each of the six concepts was relatively similar, with some differences noted for the concept, *A Personal Story of Hope*. For all six concepts, Factor I is a predominant factor, while Factors II and III are considerably smaller. For five of the concepts, specifically, *Hope, A Hopeful Person, A Person without Hope, Dave's Story* and *Karen's Story,* the three factors accounted for a similar percentage of the total variance, ranging from 46.2% to 53.3%. In contrast, the three factors for the concept, *A Personal Story of Hope,* accounted for a considerably larger amount of the total variance, than the other five concepts, specifically, 62.9%. This larger percentage in variance is due to the diverse, open-ended nature of this concept. Participants shared personal stories of hope that generated a diversity of responses. These responses spanned a broader range of the hope continuum than the other concepts which were more narrow in focus.

Table 6.2

Factor Variances for the Six Hope-Related Concepts Based on the Factor Structure for *Hope* (24 variables, n=550)

Concept	**Factor Variance(%)**			**Total**
	Factor I	*Factor II*	*Factor III*	
Hope				
Total Variance	33.4	8.4	7.4	49.2
Common Variance	67.9	17.1	15.0	100.0
A Hopeful Person				
Total Variance	40.7	6.6	5.9	53.2
Common Variance	76.5	12.4	11.1	100.0
Dave's Story (story of hope)				
Total Variance	39.4	7.8	6.1	53.3
Common Variance	73.9	14.6	11.5	100.0
Personal Story of Hope				
Total Variance	53.7	4.5	4.7	62.9
Common Variance	85.4	7.1	7.5	100.0
Karen's Story (losing hope)				
Total Variance	31.5	8.4	6.3	46.2
Common Variance	68.2	18.2	13.6	100.0
A Person without Hope				
Total Variance	36.5	6.3	6.7	49.5
Common Variance	73.7	12.7	13.6	100.0

Comparison of Factor Loading Patterns

Using the factor structure for *Hope* as a template, a prediction of factor loadings for each of the remaining hope-related concepts can be made. If the concepts are similar, then the pattern of factor loadings should resemble the factor structure of *Hope*: that is, the *personal spirit* factor markers should load on Factor I; the *risk* factor markers should load on Factor II; and the *authentic caring* factor markers should load on Factor III. Variations in factor loading patterns would reflect alternate factor structures. The predicted pattern of factor loadings appears in Table 6.3.

The pattern of factor loadings for the five concepts, specifically, *A Hopeful Person, Dave's Story, A Personal Story of Hope, Karen's Story* and *A Person without Hope,* appear in Tables 6.4 to 6.6. For ease of comparison, concepts have been grouped according to their positions in semantic space, relative to *Hope*. The factor loading patterns for *A Hopeful Person* and *Dave's Story* appear in Table 6.4, as these two concepts occupied semantic space that was closest to *Hope*. Table 6.5 presents the factor loading patterns for *A Personal Story of Hope,* which was located closer to the origin than to *Hope*. Table 6.6 includes the factor loading patterns for both *Karen's Story* and *A Person without Hope*. These two concepts were located in close proximity to one another, in a region opposite to *Hope*.

As shown in Table 6.4, the pattern of factor loadings for *A Hopeful Person* and *Dave's Story* are similar to the pattern for *Hope*. This is not unexpected, as these concepts occupy similar semantic space, focusing on the positive elements of the hope construct. Based on the factor loading patterns, it would appear that the structure for *A Hopeful Person* is very similar to *Hope,* having 75% agreement with the predicted pattern. Although the factor loadings for *Dave's Story* are also similar, this pattern is more diffuse (67% agreement). One reason for this difference may be related to the nature of the concepts. The concept, *A Hopeful Person,* is presented in an abstract

Table 6.3

Predicted Pattern of Factor Loadings of *Hope* Markers for the Remaining Hope-Related Concepts

		Hope-Related Concept			
		I	II	III	
Hope	PS*	8			8
	R*		8		8
	AC*			8	8
		8	8	8	24

Note. Each cell represents the number of *Hope* markers loading on a given factor.
*The abbreviations PS, R and AC refer to the factor markers for the concept, *Hope*, specifically, *personal spirit*, *risk* and *authentic caring*.

Table 6.4

Comparison of the Predicted Pattern with the Observed Pattern of Factor Loadings for the Concepts, *A Hopeful Person and Dave's Story*

Hope-Related Concept[a]

		I	II	III	
Hope	PS*	8			8
	R*		8		8
	AC*			8	8
		8	8	8	24

A Hopeful Person[b]

		I	II	III	
Hope	PS*	8			8
	R*	2	6		8
	AC*	2	2	4	8
		12	8	4	24

Dave's Story[b]

		I	II	III	
Hope	PS*	8			8
	R*	3	4	1	8
	AC*	3	1	4	8
		14	5	5	24

Note. Each cell represents the number of *Hope* markers loading on a given factor.

[a] Predicted. [b] Observed.

*The abbreviations PS, R and AC refer to the factor markers for the concept, *Hope*, specifically, *personal spirit, risk* and *authentic caring.*

Table 6.5

Comparison of the Predicted Pattern with the Observed Pattern of Factor Loadings for the Concept, *A Personal Story of Hope*

Hope-Related Concept[a]

		I	II	III	
Hope	PS*	8			8
	R*		8		8
	AC*			8	8
		8	8	8	24

A Personal Story of Hope[b]

		I	II	III	
Hope	PS*	8			8
	R*	3	4	1	8
	AC*	1		7	8
		12	4	8	24

Note. Each cell represents the number of *Hope* markers loading on a given factor.
[a]Predicted. [b]Observed.
*The abbreviations PS, R and AC refer to the factor markers for the concept, *Hope*, specifically, *personal spirit, risk* and *authentic caring.*

Table 6.6

Comparison of the Predicted Pattern with the Observed Pattern of Factor Loadings for the Concepts, *Karen's Story and A Person without Hope*

Hope-Related Concept[a]

		I	II	III	
Hope	PS*	8			8
	R*		8		8
	AC*			8	8
		8	8	8	24

Karen's Story[b]

		I	II	III	
Hope	PS*	4	4		8
	R*		5	3	8
	AC*	6		2	8
		10	9	5	24

A Person without Hope[b]

		I	II	III	
Hope	PS*	5		3	8
	R*	5	3		8
	AC*	3	1	4	8
		13	4	7	24

Note. Each cell represents the number of *Hope* markers loading on a given factor.
[a]Predicted. [b]Observed.
*The abbreviations PS, R and AC refer to the factor markers for the concept, *Hope*, specifically, *personal spirit*, *risk* and *authentic caring*.

format, similar to the concept, *Hope*. In contrast, *Dave's Story* is presented in a more tangible, story format, which may be more open to a diversity of interpretations and responses.

Similar to *A Hopeful Person* and *Dave's Story*, the pattern of factor loadings for the concept, *A Personal Story of Hope,* most closely resembles the predicted pattern with 79% agreement (see Table 6.5). Unlike the first two concepts, however, this concept occupies semantic space that is closer to the origin than to *Hope*. Again, this finding is not surprising, as it reflects the composite nature of this concept, in which ratings of personal stories ranged from the positive to the negative end of the hope continuum. Thus, although the overall meaning of this concept was different from *Hope*, the factor structures were similar.

The pattern of factor loadings for the concepts, *Karen's Story* and *A Person without Hope,* are presented in Table 6.6. These patterns are considerably different from the predicted pattern (46% and 50% agreement, respectively). As noted earlier, the concepts, *Karen's Story* and *A Person without Hope,* occupy a region opposite to the concept, *Hope*. While they represent opposite regions in the Hope space, their factor structures suggest differences in kind, as well as location. The qualitative differences amongst the factor structures for *Karen's Story, A Person without Hope* and *Hope* will be discussed further under the next section of this chapter.

Comparison of Factor Themes

The pattern of factor loadings for each of the five concepts was translated into factor themes, representing the composition of the factor structure. These themes, which appear in Table 6.7, were compared with the factor themes for *Hope,* that is, *personal spirit, risk and authentic caring*. As shown in the table, the themes for the first four concepts are relatively similar. In contrast, the themes for the last two concepts,

Table 6.7

Summary of the Factor Structures for the Six Hope-Related Concepts

Concepts	**Factor Themes**		
	Factor I	*Factor II*	*Factor III*
Hope	• personal spirit	• risk	• authentic caring
A Hopeful Person	• personal spirit	• risk	• authentic caring [comfort]
Dave's Story	• personal spirit • relationship stability	• risk	• authentic caring
A Personal Story of Hope	• personal spirit • risk	• risk	• authentic caring
Karen's Story	• personal spirit • authentic caring	• risk • personal spirit [value/meaning]	• authentic caring [credibility]
A Person without Hope	• personal spirit • relationship stability • risk [boldness]	• risk [predictability]	• authentic caring • personal spirit

specifically, *Karen's Story* and *A Person without Hope,* are considerably different. The following is a more detailed comparison of these themes.

Similarities in Factor Themes

A Hopeful Person. The factor themes or structure for the concept, *A Hopeful Person,* is similar to the structure for *Hope,* with a slight modification on Factor III. Factor I has both an *evaluative* and *personal hope* component, resembling the *personal spirit* factor for *Hope.* Factor II is similar to the *risk* factor, having both a *predictability* and *boldness* component. Factor III predominantly resembles the *comfort* component of the *authentic caring* factor for *Hope.* The *credibility* component is less prominent, being shared by all three factors. This third factor represents the necessary, but not sufficient concept of caring, emphasizing comfort without credibility.

Dave's Story. The factor structure for the concept, *Dave's Story,* is similar to the structure for *Hope.* Factor I has a predominant *personal spirit* component. However, this first factor also has some elements of *Hope's risk* and *authentic caring* factors, which may be interpreted as *relationship stability.* Factors II and III resemble the *risk* and *authentic caring* factors, respectively, in spite of the fact that not all markers loaded on these two factors. The emphasis on relationship stability for Factor I may be related to the nature of the concept. *Dave's Story* was presented in a more tangible format, that of story, than the abstract format of *Hope.* Within this story format, the main character, *Dave,* experienced hope at both an internal and an interpersonal level. The significance of meaningful relationships at the interpersonal level is reflected in the theme of *relationship stability.*

A Personal Story of Hope. The factor structure for the concept, *A Personal Story of Hope,* is also similar to *Hope,* in spite of the apparent differences in factor means. Factor I is predominantly a *personal spirit* factor, with an underlying *risk* component. Factor II is purely a *risk* factor. Although not all of the markers loaded on Factor II, this factor still represents the underlying themes of predictability and boldness, which are characteristic of the *risk* factor. Factor III is an *authentic caring* factor.

Differences in Factor Themes

Karen's Story and A Person without Hope. The factor structure for the concept, *Karen's Story,* is considerably different from the structure of *Hope.* Factor I has a predominant *authentic caring* component, with some *personal spirit* elements. However, this first factor lacks the central core of the *personal spirit* factor, that is, *meaning,* and has a less prominent *evaluative* component. Factor II more closely resembles the *risk* factor for *Hope,* with the underlying *personal spirit* elements of *value* and *meaning.* Factor III is similar to the *credibility* component of the *authentic caring* factor, but is lacking the *comfort* component.

Similar to *Karen's Story,* the factor structure for the concept, *A Person without Hope,* is also substantially different from the structure for *Hope.* Factor I appears to have three important components, specifically, *personal spirit, boldness* and *relationship stability.* The *personal spirit* component is much less prominent for Factor I than it is for *Hope.* Factor II is predominantly a *predictability* factor, without the *boldness* component of *Hope's risk* factor. Factor III is similar to the *authentic caring* factor for *Hope*, although it also contains some elements of the *personal spirit* factor.

These two concepts occupied semantic space in a region opposite to *Hope,* representing the negative end of the hope continuum. Thus, to properly interpret these themes, it is important to include the polarity direction of the responses. Unlike *Hope,* both of these concepts had a *personal spirit* component that was less prominent and more fragmented. This fragmentation of the *personal spirit* factor is not unlike the personal experience of a *"broken spirit"* for people who are experiencing despair. This loss of *personal spirit* was particularly apparent for *Karen's Story,* where the central core of *meaning* was missing. Both of these concepts also had a strong relationship component for Factor I. For *Karen's Story,* this relationship component represented a lack of authentic caring; while for *A Person without Hope,* this component represented relationship instability and personal withdrawal, through a loss of boldness.

The fragmentation of personal spirit and the lack of authentic caring were more prominent themes in *Karen's Story* than in *A Person without Hope.* These differences may be related to the nature of the two concepts. *A Person without Hope* was an abstract concept, which represented an individual experience. *Karen's Story* was a more tangible concept, in story format, that involved people connected within a relationship. This story provided a more indepth and encompassing view of an individual losing hope, which was intertwined within a relationship. It is not surprising that participants may have focused on the nature of this relationship between these two individuals.

Further Validation of the *Hope* Structure

Due to the potential limitations of the varimax rotation for factor structure derivation, further validity testing of the *Hope* structure was undertaken. Varimax is an arbitrary orthogonal solution, based on a mathematical model to achieve simple structure. Gorsuch (1983) outlines a major limitation of using purely mathematical models for simple structure rotation, that is, the ultimate goal of structure invariance may not be met. Since the varimax solution is arbitrary, an alternate orthogonal rotation may produce a different factor structure that more closely resembles the hypothesized or target factor structure, in this case, the factor structure for *Hope.* A procedure that can be used to determine whether an alternate orthogonal rotation would produce greater similarity between a given factor structure and a target structure is the orthogonal Procrustes procedure (Schonemann, 1966).

The orthogonal Procrustes procedure (Schonemann, 1966) was applied to each of the factor structures for the five hope-related concepts, *A Hopeful Person, Dave's Story, A Personal Story of Hope, Karen's Story* and *A Person without Hope*. Based on the varimax rotation, the factor structures for *A Hopeful Person, Dave's Story* and *A Personal Story of Hope,* were similar to *Hope;* while the factor structures for *Karen's Story* and *A Person without Hope* were considerably different from *Hope.* For the structures that were considerably different from *Hope,* it is important to determine whether or not an alternate orthogonal rotation, other than varimax, might produce factor structures that more closely resemble the structure for *Hope.* For each concept, the factor structure was rotated, using an orthogonal Procrustes solution, to make it resemble, as closely as possible, the structure for *Hope.* The results of these rotations did not improve the interpretability derived from the varimax rotation.

Summary

The six hope-related concepts can be categorized according to their location in semantic space and their factor structures. The concepts, *Hope, A Hopeful Person* and *Dave's Story* occupied similar semantic space and had similar factor structures. The concept, *A Personal Story of Hope,* occupied a more neutral position in semantic space, highlighting the composite nature of this concept. Its factor structure, however, was similar to *Hope.* The concepts, *Karen's Story* and *A Person without Hope,* occupied a semantic space that was opposite to hope. Although these two concepts occupied opposite space, their structures were qualitatively different from *Hope.*

These findings raise the following points for discussion and further inquiry:

(a) The concepts that occupied similar semantic space, that is, *Hope, A Hopeful Person* and *Dave's Story,* represented the positive end of the hope continuum. These concepts had similar meaning and structures. These findings suggest that concepts reflecting the positive elements of hope are generally viewed favorably. They also provide further validation for the factor structure for *Hope.*

(b) Concepts that occupied a region opposite to *Hope,* that is, *Karen's Story* and *A Person without Hope,* represented the negative end of the hope continuum. Due to their location in the semantic space, these concepts appear to have meaning that is opposite to *Hope*. However, the factor structures for these concepts are qualitatively different from *Hope,* suggesting that the experience of losing hope is not necessarily the opposite of maintaining hope. This finding has important implications with respect to defining and understanding the experience of hope and the process of hoping. Some people have viewed hope on a continuum, ranging from hopefulness to hopelessness (McGee, 1984). Others have described hope as being the opposite of despair (Stephenson, 1991) or as an antidote to fear (Jevne, 1991). The findings from this study suggest that the experience of losing hope may be more than the absence of hope or hopelessness. Further research is warranted to better elucidate the qualitative differences of these factor structures and hope experiences.

(c) In a closer examination of factor structures, some important differences were noted between general concepts, that focused primarily on the individual, and specific concepts, embedded within the context of illness or adversity, that involved relationships with others. These findings suggest that hope is experienced at both an internal and interpersonal level. At an internal level, the sense of personal spirit is a predominant force. As hope is experienced within relationships, authentic caring and relationship stability become prominent themes. In the absence of a strong relationship component, the personal spirit component becomes fragmented. These findings highlight the interdependent relationship between the personal experience of hope and hope experienced within relationships.

CHAPTER SEVEN

A COMPARISON OF HEALTH AND ILLNESS EXPERIENCES

Chapter Seven focuses on the meaning of hope within different health and illness experiences. The findings presented in this chapter respond to the primary research question, *"Are there differences in the meaning of hope, amongst individuals with different health and illness experiences?"* In an effort to answer this question, the factor means of the health, illness and nursing subsamples were initially compared. Based on this initial comparison, within-group factor mean comparisons were conducted for specific variables, related to the experiences of health and illness. These variables were classified under the general categories of demographics, stress, health, illness and nursing.

The factor means for these comparisons appear in Appendices H through M. The factor means were calculated from the raw score values, which ranged from 1 to 7. Thus, factor means below 4.0 represent the positive end of the continuum, while means above 4.0 represent the negative end of the continuum. For consistency in interpretation, mean differences will be expressed as a polarity, based on the direction of the scores from the midpoint of 4. Scores that are closer to the value of 1 will be viewed as more positive than scores that are closer to the value of 4. Scores that are closer to the value of 7 will be viewed as more negative than scores that are closer to the value of 4.

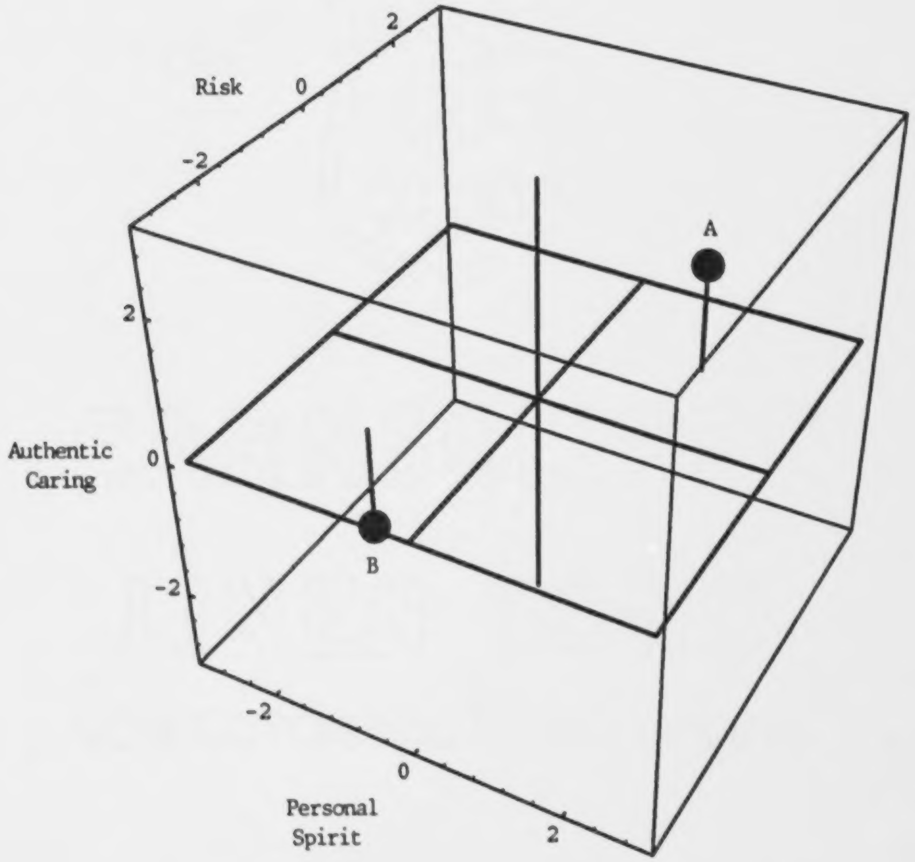
The relevant findings from the factor mean comparisons will be presented in the next two sections of this chapter. To assist in the interpretation of the findings, some of the significant factor mean comparisons will be presented as three-dimensional plots in semantic space. For these graphical representations, the scale for the factor means has been converted from a range of 1 to 7 to a range of +3 to -3. Factor means within the range of 0 to +3 have been plotted along the positive end of each axis, while factor means within the range of 0 to -3 have been plotted along the negative end. The origin (0,0,0) represents the midpoint for the factor means. Most of the comparisons that will be presented fall within two regions of the semantic space. The first region, Region A, is the semantic space representing the positive polarity for all three factors. As shown in Figure 7.1, Point A, which is within Region A, is located above the upper right quadrant of the horizontal plane. The second region, Region B, is the semantic space representing the negative polarity for all three factors. This space is illustrated in Figure 7.1 by Point B, which is situated below the lower left quadrant of the horizontal plane.

Comparison of Health, Illness and Nursing Subsamples

There were two important findings that emerged from the factor mean comparisons of the three subsamples. First, people representing the experiences of health, illness and nursing generally had similar views of hope, apart from their personal story of hope. There were no significant differences amongst the factor means for the concepts, *Hope, A Hopeful Person, Dave's Story, Karen's Story* and *A Person without Hope.* Second, healthy individuals and people with illness experience generally rated their personal stories of hope more positively than nurses rated their personal stories. For a more detailed review of these findings, the factor means for the three subsamples, across the six hope-related concepts, appear in Appendix H.

For the concept, *A Personal Story of Hope,* the ratings by nurses differed significantly from the ratings by people in either the illness or health subsamples. The illness subsample ratings were significantly more positive on the *personal spirit* and *risk* factors, while the health subsample ratings were significantly more positive on the *authentic caring* factor, than the nursing subsample ratings. In contrast to the nursing subsample, there were no significant differences in ratings between the health and

Figure 7.1. The semantic space representing the positive and negative polarities of the hope continuum for the three *Hope* factors, *personal spirit, risk*, and *authentic caring*.



Key:

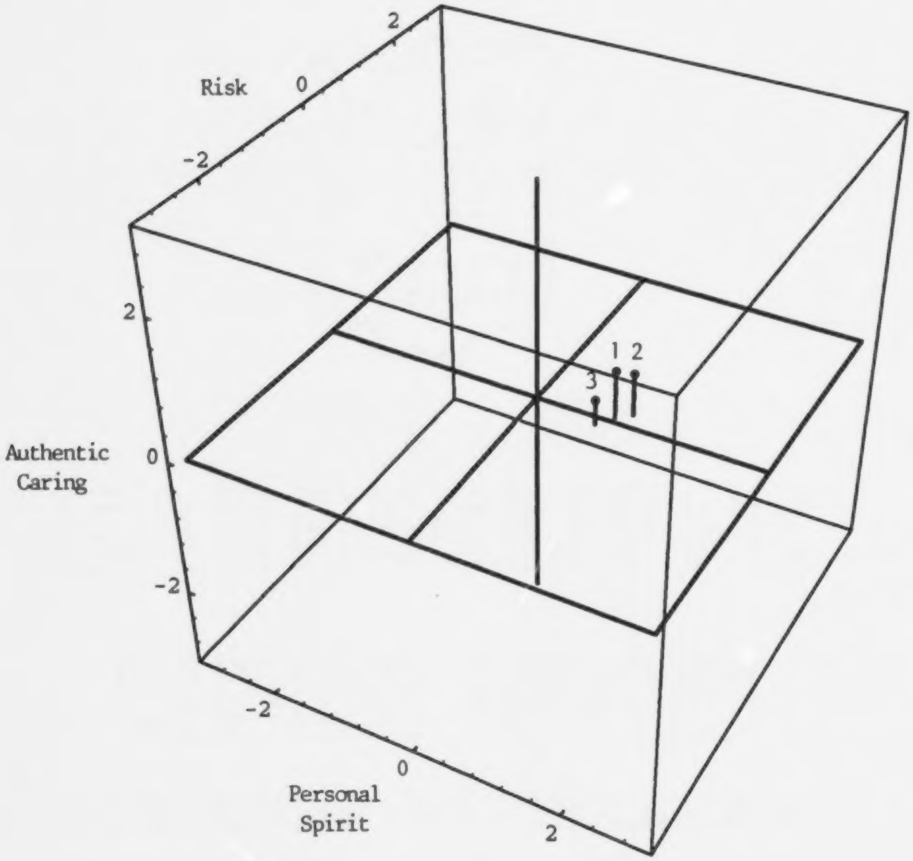
A - Positive on all factors
B - Negative on all factors

illness subsamples for the concept, *A Personal Story of Hope*. The findings for this concept are illustrated in Figure 7.2. As shown in this figure, the health and illness subsamples are located close together in Region A, representing the positive polarity for all three factors. In contrast, the nursing subsample is located outside of Region A, closer to the origin and above the lower right quadrant of the horizontal plane.

The different ratings of personal stories amongst the health, illness and nursing subsamples are open to interpretation. One interpretation is that people in the illness subsample may have a greater sense of personal spirit, because of the meaning that they have derived from their experience with adversity. This enhanced sense of personal spirit may influence their willingness to risk and ability to form meaningful, authentically caring relationships. This interpretation does not, however, adequately explain why there were no differences between healthy individuals and people with illness experience. Since nursing was the only subsample that differed significantly from the other two subsamples, it raises the thought of whether or not these differences are in some ways related to the professional caregiver role. The following question emerged from these findings: *"What is the relationship between the professional role of the caregiver and the personal experience of hope?"*

The general finding that people had similar views of hope, apart from their personal stories, is somewhat surprising. As these subsamples represented three different health and illness experiences, a larger number of significant differences was anticipated. One interpretation of these unexpected findings is that most people view hope in the same way, regardless of their experience with health or illness. On closer examination, however, a second question of inquiry was raised, specifically, *"Are there other factors that might contribute to differences in the meaning of hope, that are not initially apparent from a comparison of these three subsamples?"* This question guided the

Figure 7.2. Factor mean comparisons for the concept, *A Personal Story of Hope,* based on *health, illness* and *nursing subsamples.*



Key:

1 - Health subsample
2 - Illness subsample
3 - Nursing subsample

comparison of factor means for specific variables, related to the health and illness experiences, across all six concepts. The findings from these factor mean comparisons are presented in the next section of this chapter.

Comparison of Health and Illness Variables

A number of variables, related to health and illness, that could potentially influence the meaning of hope, were identified. The selection of these variables was based on previous findings in the hope literature, as well as the responses from the participants. A list of these variables appears in Table 7.1, together with sample sizes. As shown in this table, these variables have been classified under five major categories: demographics, stress, health, illness and nursing. Even after selection, the number of potential comparisons amongst groups, concepts and factors is very large. To make the presentation as clear as possible, it was decided to place all of the tables of means into appendices and present the results verbally and graphically. For those interested in a closer examination of the statistics, reference to appropriate appendices is provided.

The types of comparisons, as well as the tables of factor means, appear in Appendices I through M. Appendix I summarizes the factor mean comparisons that were conducted for each of the *demographic* variables, using the total sample (n=550). Appendix J presents the statistics for the *stress* variables, in which comparisons were made between people who had experienced a specific stress factor at some point in their lives and a reference *stress-free* group. This *stress-free* group was comprised of those participants who reported they had not experienced a stressful, possibly life-threatening event (n=278). The comparisons of the ***health*** variable, ***health status,*** appear in Appendix K. As shown in this Appendix, comparisons were made using the total sample, the health subsample (n=146) and the illness subsample (n=159). It is important to note that for the health subsample, there were three levels of comparison,

Table 7.1

Specific Variables Related to Health and Illness Selected for Factor Mean Comparisons

Variables	Sample Size
Demographics • age • employment • gender	Total Sample (n=550)
Stress • financial • family health • assault • relationships • loss • abuse • personal health • accidents	Total Sample (n=550) Stress-Free Group (n=278)
Health • health status	Total Sample (n=550) Health Subsample (n=146) Illness Subsample (n=159)
Illness • type of illness • cancer experience • onset of illness	Illness Subsample (n=159)
Nursing • nursing experience • illness experience	Nursing Subsample (n=206)

ranging from *excellent to good* health, while for the illness subsample and the total sample there were five levels of comparison, ranging from *excellent to poor* health. The comparisons for each of the *illness* variables, based on the illness subsample, are presented in Appendix L. Appendix M summarizes the comparisons that were made for the two *nursing* variables, *nursing experience* and *illness experience*, using the nursing subsample (n=206).

The results of the factor mean comparisons appear in Tables N.1 and N.2, Appendix N. Table N.1 summarizes the significant main effects for the *demographic* and *stress* variables. Table N.2 summarizes the significant main effects for the *health, illness* and *nursing* variables. Within each table, the concepts are organized according to their level of specificity. The general or universal concepts of *Hope, A Hopeful Person and A Person without Hope,* are represented in the upper half of each table. The more specific concepts, embedded within the context of illness or adversity, are represented in the lower half of each table. These concepts include *Dave's Story, Karen's Story* and *A Personal Story of Hope.*

A general finding emerged from these factor mean comparisons. The more specific concepts, *Dave's Story, Karen's Story* and *A Personal Story of Hope,* elicited a wider diversity of responses than the universal concepts, *Hope, A Hopeful Person* and *A Person without Hope* (see Tables N.1 and N.2). This suggests that hope-related concepts, embedded within a specific context, may be more meaningful and thus more effective at eliciting the uniqueness of individual experience, than general concepts.

Given the greater number of significant differences, a decision was made to limit this discussion to the relevant, significant findings for the specific concepts of *Dave's Story, Karen's Story* and *A Personal Story of Hope*. Of the three concepts, *A Personal Story of Hope* had the greatest number of significant differences. *Dave's*

Story had slightly more significant differences than *Karen's Story*. The findings for each of these three concepts will be presented in order of the number of significant differences, beginning with *A Personal Story of Hope.*

A Personal Story of Hope

For the concept, *A Personal Story of Hope,* participants were asked to describe an experience in their life when their own hope had been challenged. This story could have been a personal experience or an experience of another individual. They were then asked to rate their hope relative to this experience. Of the 475 participants who completed this portion of the questionnaire, 386 people described and rated a personal story of hope, while the remaining 89 people provided ratings but did not disclose the nature of this story.

All of the participants, who generated a personal story of hope (n=386), described stories of adversity. These stories covered a wide range of experiences, including personal loss, personal illness, illness and/or death of significant others, accidents and other traumatic life events. For some, the stories had more hopeful endings, than others. Although these were all stories of adversity, the responses to these stories, that is the personal ratings of hope, ranged from the positive to the negative end of the hope continuum.

The diverse responses to this concept, *A Personal Story of Hope,* resulted in the identification of a large number of significant differences for the health and illness variables. Significant differences were identified for seven variables, specifically, *age, stress, health status, type of illness, onset of illness, cancer experience* and *nursing experience.* A summary of the general findings for each of these variables appears in Table 7.2. A more in-depth summary, highlighting the relevant significant differences

Table 7.2

A Summary of the General Findings for the Concept, *A Personal Story of Hope*, Based on Specific Health and Illness Variables

Variable	**General Findings**
Age	• Older people rated their stories more positively than younger people.
Stress	• People who had experienced *financial* difficulties, *relationship* difficulties or an *assault* rated their stories more negatively than the stress-free group.
Health Status	• People with better health rated their stories more positively than people with poorer health. • Based on health status, people with an illness experience rated their stories more positively than people in the health group.
Type of Illness	• People with life-threatening illness experience rated their stories more positively than people with serious or chronic illness experience. • People with chronic illness experience rated their stories more negatively than the life-threatening or serious illness groups.
Cancer Experience	• People with cancer experience rated their stories more positively than people with an illness experience other than cancer.
Onset of Illness	• People who had experienced a childhood onset of illness rated their stories more positively than people who had experienced an adult onset of illness.
Nursing Experience	• Nurse managers rated their stories more positively than staff or student nurses.

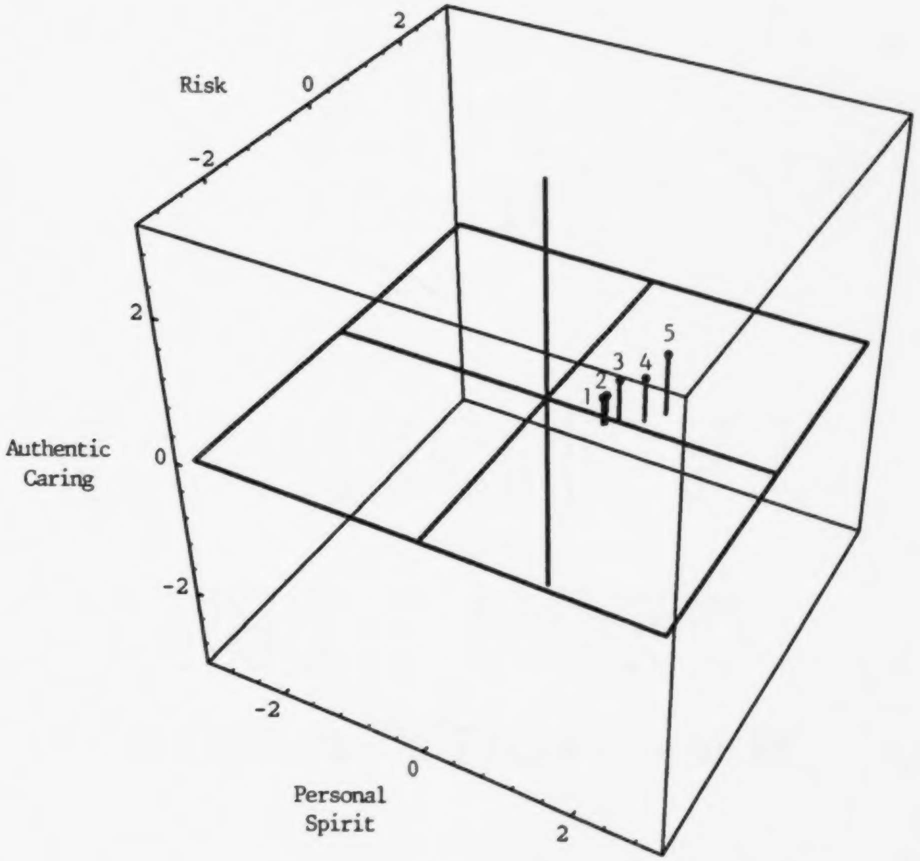
for each of these variables, is presented in Table N.3. The following is a discussion of the relevant findings.

Demographic Variables

Of the three demographic variables, there were significant differences only for the variable, *age*. There were no significant differences for either *employment status* or *gender*. The major finding for the variable, *age,* was that older people generally rated their personal stories of hope more positively than younger people. As shown in Figure 7.3, people in the *51 to 60* and the *over 60* age groups are located closer to the positive end of the continuum in Region A. In contrast, the two age groups representing people *40 years of age and under* are located outside of Region A, closer to the origin and above the lower right quadrant of the horizontal plane.

These findings may be interpreted in a number of ways. One interpretation is that life experience and maturity may enhance a person's view of hope. Another possible interpretation for these differences relates to cohort effects. Older people may have faced adversities, such as the Depression or war, that were more meaningful, thus enhancing their own sense of personal spirit. Although they faced many elements of uncertainty, older people may have experienced a greater sense of predictability in certain aspects of their lives. Societal changes were less frequent and traditional gender roles were well-defined. They were also likely to have experienced a greater sense of community and familial support. In contrast, younger people today are facing more vague, intangible adversities that are perhaps less meaningful. Rapid societal changes are creating less predictability. Gender roles, as well as the definition of family, are in a state of transition. Increased mobility and independence has fractured the traditional community and familial networks, creating a greater sense of isolation for some people.

Figure 7.3. Factor mean comparisons for the concept, *A Personal Story of Hope*, based on, *age* (total sample, n=550).



Key:

- 1: 18 - 30 years
- 2: 31 - 40 years
- 3: 41 - 50 years
- 4: 51 - 60 years
- 5: 61 years and older

These cohort effects reflect the differences between younger and older people in terms of *personal spirit, risk* and *authentic caring.*

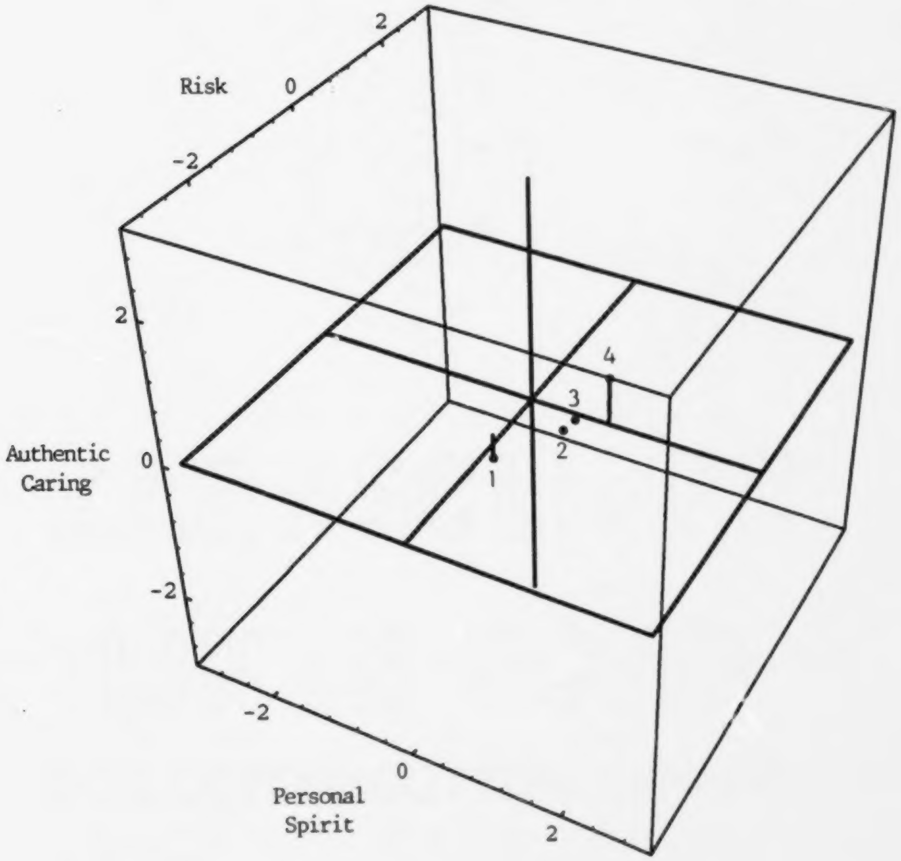
The relationship between age and hope is not well documented in the literature. In a recent review of the literature, Farran et al. (1995) suggest that hope is not significantly affected by age. It is important to note, however, that this review was limited to studies, involving cancer patients, that focused on the relationship between age and hopefulness or level of hope (Mishel, Hostetter, King, & Graham, 1984; Herth, 1989; McGill, 1991). In contrast, the findings from this study suggest that there may be qualitative differences in the way that older people experience hope, as opposed to younger people. A number of studies have focused specifically on hope in the elderly population, as reviewed by Farran et al. However, further research is needed to explore the qualitative differences in the experience of hope across the lifespan.

Stress Variables

In general, people who had experienced the stress of *relationships, assault* or *finances* rated their personal stories more negatively than the people who had not experienced a stressful, life event, that is, the stress-free group. As shown in Figure 7.4, the three stress factor variables are located outside of Region A, and closer to the origin than the stress-free group, which is located above the horizontal plane in Region A. Two of the stress factor variables, *financial* and *relationship stress,* are located below the horizontal plane, which represents the negative polarity of the *authentic caring* factor. Some caution is warranted in interpreting the differences for the *financial stress* group, however, given its small group size (n=12).

The appearance of a relationship between negative stress factors or life experiences and hope is not surprising. People who have had negative experiences with relationships or have been physically or sexually assaulted may have difficulty with

Figure 7.4. Factor mean comparisons for the concept, *A Personal Story of Hope*, based on *financial, relationship* and *assault* stress factors (total sample, n=550).



Key:

1 - *Financial* stress factor
2 - *Relationship* stress factor
3 - *Assault* stress factor
4 - *Stress-free* group

trust issues or forming new relationships. The inability to form trusting relationships may influence personal spirit or risk. However, it is interesting to note that people, who had experienced the stress of *relationships or assault,* still had a positive rating of personal spirit, as shown in Figure 7.4.

In the hope literature, positive trusting relationships have been identified as a key element of the hope experience. Although it is not possible to imply a causal relationship, the extent to which negative relationship experiences may influence hope warrants further research. Clinically, however, it is also interesting to note that some people have a very positive view of hope in spite of experiencing some of these negative, stressful life events. Further research is warranted in exploring the qualitative differences in hope amongst individuals with similar experiences of adversity. Two questions are raised for further inquiry:

(a) *"What is the influence of negative life experiences on the personal experience of hope?"*

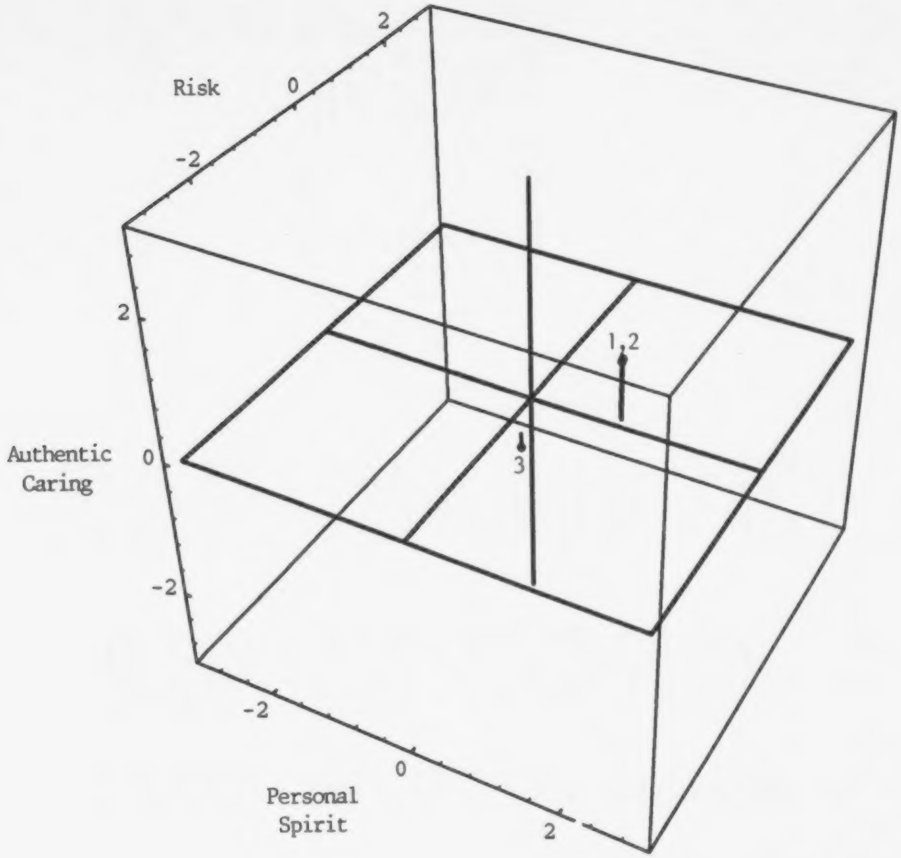
(b) "How do some people maintain a sense of hope, in spite of these negative life experiences, while others do not?"

Health Status

With respect to *health status,* people with better health rated their stories more positively than people with poorer health. These findings, shown in Figures 7.5 and 7.6, suggest that there may be qualitative differences in the experience of hope, based on health status. However, some caution in interpretation of the *poor health status* group is warranted, given its small sample size for the illness subsample (n=9) and for the total sample (n=10).

As health declines, the experience of hope in a person's life may change. For some people, as their health declines, their energy levels decline, making it more difficult to

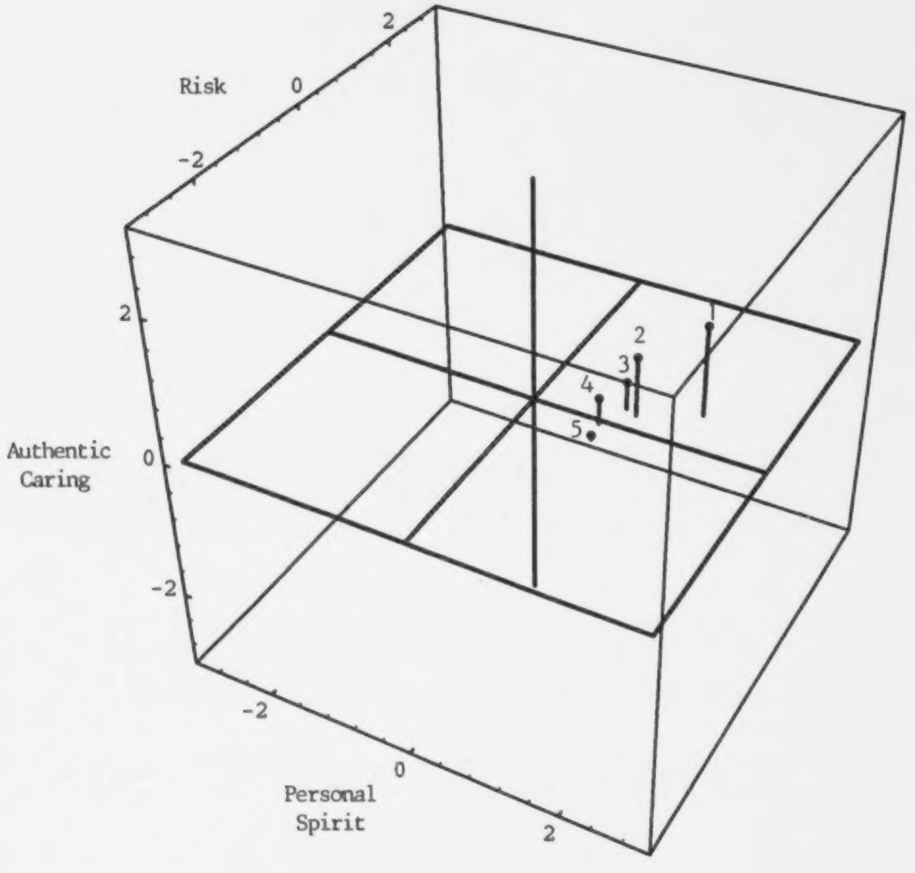
Figure 7.5. Factor mean comparisons for the concept, *A Personal Story of Hope,* based on the variable, ***health status*** (health subsample, n=146).



Key:

1 - Excellent Health
2 - Very Good Health
3 - Good Health

Figure 7.6. Factor mean comparisons for the concept, *A Personal Story of Hope*, based on the variable, ***health status*** (illness subsample, n=159).



Key:

- 1 - Excellent Health
- 2 - Very Good Health
- 3 - Good Health
- 4 - Fair Health
- 5 - Poor Health

maintain relationships. Similarly, as a patient's health declines, some professional caregivers may gradually withdraw their services. These experiences may result in a decreased sense of authentic caring for people with poorer health. The decrease in energy levels may also influence a person's willingness or ability to risk. This change in authentic caring and risk may also influence personal spirit, as people struggle to find meaning in their declining level of health.

The relationship between health status and hope is not well documented in the literature. Most studies, with respect to health status, have focused on the terminally ill. In a recent review of the literature on hope in terminal illness, Farran et al. (1995) conclude that people with terminal illness do not show a loss of hope as physical symptoms increase or as death becomes imminent. The studies, from which this conclusion was drawn, focused on the quantitative measurement of levels of hopefulness amongst the terminally ill. In contrast, few studies have focused on the qualitative experience of hope in the terminal phase of illness (Hall, 1990; Herth, 1990). Further research is warranted in exploring the experience of hope not only in the terminally ill, but across all levels of health.

A further comparison of health status between the health and illness subsamples revealed some unexpected findings. It is interesting to note that in the illness subsample, people with *good* or *excellent* health had more positive ratings of their stories than people with *good* or *excellent* health in the health subsample. As mentioned previously, one interpretation of this finding is that people with an illness experience may have a greater sense of *personal spirit, risk* and *authentic caring,* because of the meaning that they have derived from their experience with adversity. Although this explains why the ratings were more positive for the illness subsample, it does not explain why the ratings were considerably more negative for the people who rated their health as *good* in the health subsample. One interpretation of this unexpected finding is that a rating of *good*, on a scale ranging from excellent to poor, may actually represent a lower or poorer level of health. An alternate interpretation is that, even in the absence of illness, people may be psychologically unhealthy. To adequately address these differences, a more in-depth analysis of the personal stories may be warranted.

Although an interpretation of the findings with respect to *health status* remains unclear, these findings support the need for further research across all levels of health. It also raises the question of how we define health, illness and wellness. These findings give rise to the following questions for further reflection:

(a) *"How is a person's experience of hope affected by changes in health status?"*

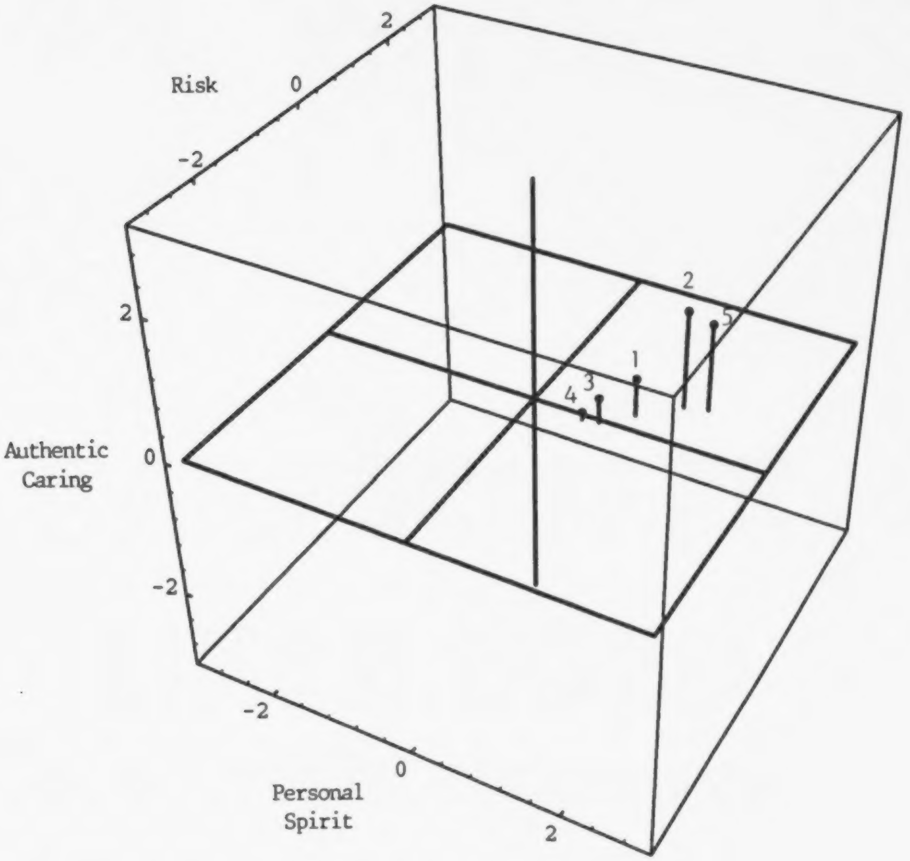
(b) *"How does a person's perception of health status influence the personal experience of hope?"*

The Illness Variables

There were significant differences in the ratings of personal stories for each of the three illness variables, *type of illness, cancer experience* and *onset of illness.* In general, people with life-threatening illness, cancer experience and a childhood onset of illness rated their stories more positively than other illness experiences.

With respect to *type of illness,* people who had experienced a life-threatening illness rated their personal stories of hope more positively than people with a serious illness. In contrast, people with chronic illness experiences rated their stories more negatively than people with life-threatening or serious illness experience. These findings are illustrated in Figure 7.7. One interpretation of these findings is that people who have experienced a life-threatening illness have a greater sense of personal spirit, because of the meaning they have derived from facing their own mortality. In contrast, people

Figure 7.7. Factor mean comparisons for the concept, *A Personal Story of Hope*, based on the variable, *type of illness* (illness subsample, n=159).



Key:

1 - serious illness experience only
2 - life-threatening illness experience only
3 - chronic illness experience only
4 - two types of illness experience
5 - serious, life-threatening and chronic illness experiences

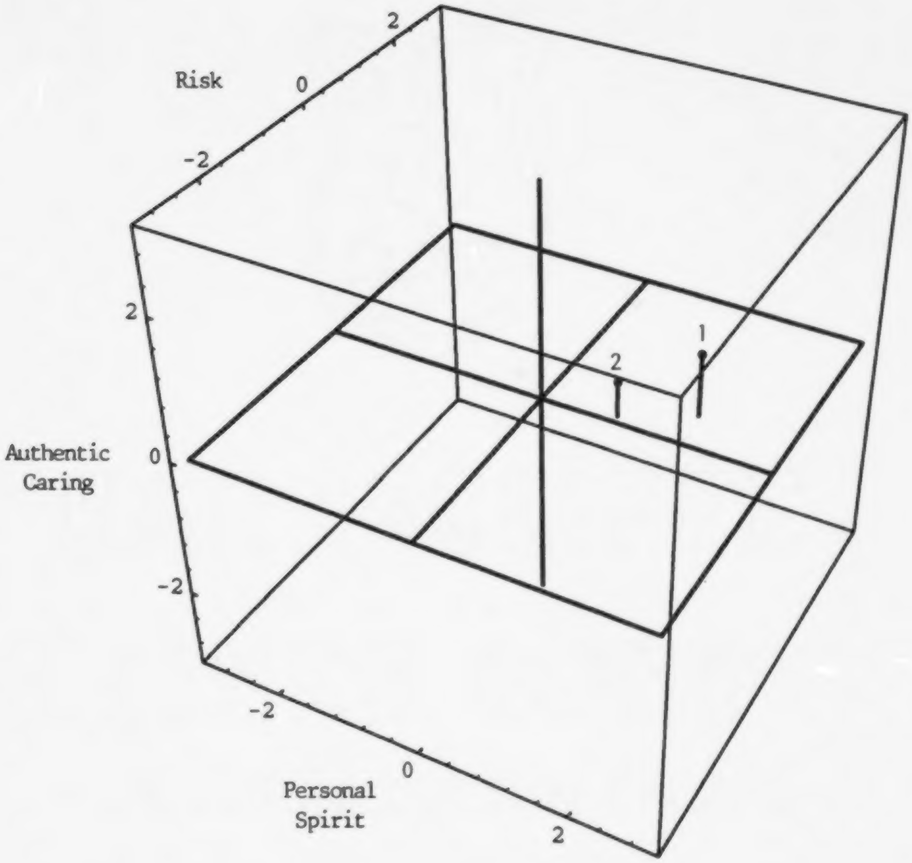
with chronic illnesses may experience a deflating personal spirit, as their illness progresses and their health declines. Some people with chronic illness may also experience a diminished sense of authentic caring, as caregivers withdraw their commitment and support from these "incurable" cases.

Similar to the life-threatening illness experience, people with *cancer experience* rated their personal stories of hope more positively than people with an illness experience other than cancer. These findings are illustrated in Figure 7.8. As shown in this figure, both illness groups are located in Region A, above the horizontal plane. However, the *cancer experience* group is located closer to the positive end of the hope continuum than the *noncancer experience* group. As most of the cancer experiences were also life-threatening, it is not surprising that these ratings were significantly more positive than noncancer illness experiences.

With respect to *onset of illness,* people who had experienced the onset of illness in childhood, rated their personal stories of hope more positively than people who had experienced an illness in adulthood (see Figure 7.9). Some caution in interpretation of this finding is warranted, however, due to the small size of the childhood group (n=11).

These findings suggest that there may be a relationship between the nature of the illness experience and the experience of hope. There appear to be qualitative differences in the experience of hope based on the severity and chronicity of the illness experience, as well as the age of onset of the illness. Most studies in the literature have focused on life-threatening illnesses, particularly cancer. Further research is warranted to explore the qualitative differences in the experience of hope, based on the nature of the illness experience. The following questions are posed for further exploration:

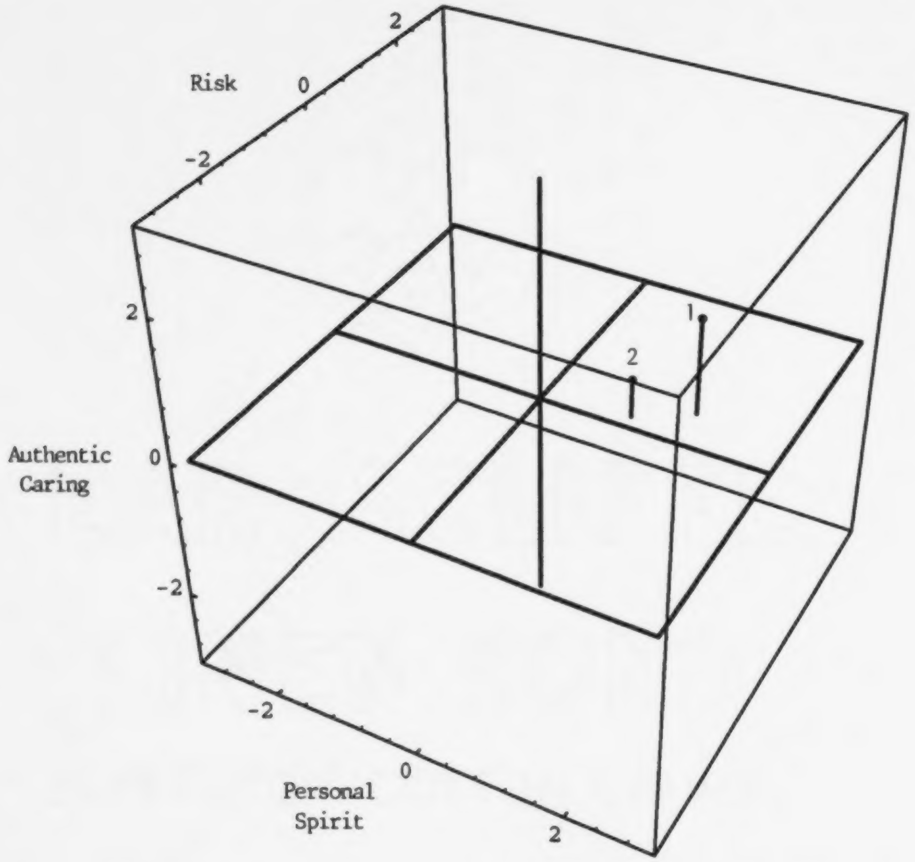
Figure 7.8. Factor mean comparisons for the concept, *A Personal Story of Hope*, based on the variable, *cancer experience* (illness subsample, n=159).



Key:

1 - Cancer experience
2 - Illness experience other than cancer

Figure 7.9. Factor mean comparisons for the concept, *A Personal Story of Hope*, based on the variable, *onset of illness* (illness subsample, n=159).



Key:

1 - Childhood onset
2 - Adult onset

(a) *"How does the severity and chronicity of the illness experience influence the personal experience of hope for patients and caregivers?"*

(b) *"What is the influence of the cancer experience on the personal experience of hope?"*

(c) *"What is the influence of a physical assault, like illness, early in life, on the personal experience of hope?"*

Nursing Variables

Significant differences were identified for the nursing variable, *nursing experience,* while there were no significant differences for the variable, *illness experience.* With respect to *nursing experience,* nurse managers rated their personal stories more positively than general duty or student nurses. As shown in Figure 7.10, the *nursing managers* group is located in Region A, closer to the positive end of the hope continuum. In contrast, the *general duty and student nurses* groups are located outside of Region A, closer to the origin. These findings suggest that there may be a relationship between nursing experience and hope. However, these differences may also be related to the differences in age amongst these three groups.

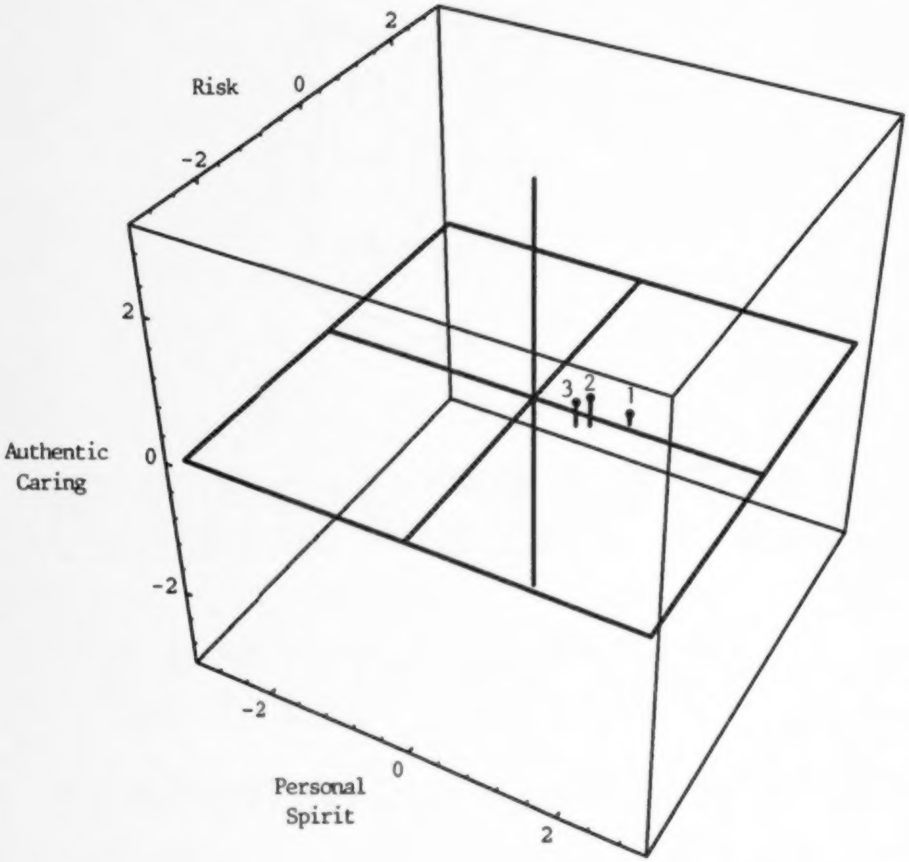
Dave's Story

For the concept, *Dave's Story,* significant differences were noted for the variables *age, gender, stress, health status* and *nursing experience.* A summary of the general findings appears in Table 7.3. A more detailed description of the relevant, significant findings is presented in Table N.4, Appendix N. Of the general findings, the findings relating to *age, gender* and *stress* are of particular interest.

Age

With respect to *age,* older people rated this story more positively, in terms of *risk* and *authentic caring,* than younger people. One interpretation of these findings is that older people may have identified with the main character in the story, Dave, given

Figure 7.10. Factor mean comparisons for the concept, *A Personal Story of Hope,* based on ***nursing experience*** (nursing subsample, n=206).



Key:

- 1 - Nursing Managers
- 2 - General Duty Nurses
- 3 - Student Nurses

Table 7.3

A Summary of the General Findings for the Concept, *Dave's Story*, Based on Specific Health and Illness Variables

Variable	**General Findings**
Age	• Older people rated this story more positively than younger people.
Gender	• Women rated this story more positively than men.
Stress	• People who had experienced the stress of *family health* or *loss* rated this story more positively than the stress-free group.
Health Status	• People with very good health rated this story more positively than people with good health (for the health subsample).
Nursing Experience	• Nurse managers and staff nurses rated this story more positively than student nurses.

Dave's age. As discussed under the concept, *A Personal Story of Hope,* older people may have personally experienced a greater sense of predictability and familial support in their lives than younger people. It is therefore not surprising that they might value the qualities of *risk* and *authentic caring* that are portrayed in *Dave's Story.* It would be interesting to determine whether or not younger people might relate differently to a story involving a younger person. This finding reinforces the importance of using personally meaningful stories to access the experience of hope. It also confirms the findings based on age differences for the concept, *A Personal Story of Hope.* Again, further research regarding the relationship between age and the qualitative experience of hope is warranted.

Gender

With respect to *gender,* women rated this story more positively in terms of *personal spirit* and *authentic caring* than men. However, some caution in interpretation is warranted due to the difference in frequencies between men and women in this sample. The differences between men and women in valuing relationships has been cited in the literature. In general, women find personal meaning through relationships with others. It is through their valuing of relationships that they may gain a greater sense of personal spirit. Thus, it is not surprising that women might value the personal spirit and authentic caring components of this story more than men. One question that this finding raises is whether or not these differences between men and women were related to the gender of the person in the story, that is, Dave.

The relationship between gender and hope remains unclear in the literature. In a recent review, Farran et al. (1995) suggest that, based on current findings, hope in the cancer patient is not significantly affected by gender. As this review was limited to the cancer experience, it is difficult to generalize from these findings. However, based on the findings from this study, further research regarding the relationship between gender and hope is warranted. The following question is raised for further reflection: *"How might gender influence the personal experience of hope?"*

Stress Factors

In general, people who had experienced the stress factors of *family health* or *loss* rated this story more positively in terms of *risk* and *authentic caring* than the stress-free group. These individuals may place a greater value on relationships, given their own experience with this type of an adversity. They may also have experienced the uncertainty of an illness or a death from the caregiver's perspective. Thus, it is not surprising that people with these types of experiences might place a greater value on the risk and authentic caring components of this story. These findings raise the following question: *"How might the stress factors of family health or personal loss influence the personal experience of hope?"*

Karen's Story

For the concept, *Karen's Story,* a number of significant differences were identified for the variables, *age, health status, onset of illness* and *nursing experience.* Table 7.4 summarizes the general findings for each of these variables. A more in-depth description of the relevant significant findings for this concept appears in Table N.5, Appendix N.

Of the general findings highlighted in Table 7.4, the findings relating to *health status* and *nursing experience* are of particular interest. With respect to *health status,* people with poorer health rated this story more negatively than people with better levels of health. *Karen's Story* was about a person whose health was declining. Thus, participants, who rated their health as poor, may have identified with the main character in this story, that is, Karen. With respect to *nursing experience,* nurse managers rated

Table 7.4

A Summary of the General Findings for the Concept, *Karen's Story*, Based on Specific Health and Illness Variables

Variable	General Findings
Age	• Younger people rated this story more negatively than older people.
Health Status	• People with poor health rated this story more negatively than people with better levels of health (total sample) • People with good to excellent health rated this story more negatively than people with good health (health subsample).
Onset of Illness	• People who had experienced an onset of illness in adulthood rated this story more negatively than people who had experienced a childhood onset of illness.
Nursing Experience	• Nurse managers rated this story more negatively than staff or student nurses.

this story more negatively than student or staff nurses. As this story involved nursing, nurse participants may have focused primarily on the nursing component of this story. One interpretation is that nurse managers may have viewed the nurse's behavior in this story more negatively than either student or staff nurses. Regardless of the interpretation, both of these findings reinforce the importance of using stories that are personally meaningful to access the experience of hope.

Non-Significant Findings

To this point, this discussion has focused on the significant findings amongst the different variables for the three specific concepts. It is also interesting to note which variables did not have significant findings. The one variable, in particular, for which very few significant differences were identified was the demographic variable of employment. As shown in Table N.1, Appendix N, there were only a few significant differences that were spread across four concepts. In general, people who were employed had similar ratings of the hope concepts as people who were unemployed.

This finding regarding employment status is surprising. It might have been predicted that there would be more differences between employed and unemployed people with respect to the experience of hope. One possible explanation is that a person's experience of hope is less affected by employment status than by other variables. A second possible explanation is that, given the current economic restraints and increasing work demands, people who are employed are also experiencing a form of uncertainty, as are people who are unemployed. In the past, people found meaning through their work. This may no longer be the case. It would be interesting to research further the role of employment within the qualitative experience of hope and meaning.

Summary

Individual differences in the experience of hope were best accessed through the use of personally meaningful stories. A number of differences were identified with respect to *age, gender, stress, health status, illness experience* and *nursing experience*. The nature of these relationships were not always clear. However, these findings reinforce the need to further explore these variables within the experience of hope. They also provide a direction for further data analysis.

A number of approaches could be used to further analyze the data. It may be useful to examine the diversity of responses that were obtained from the concept, *A Personal Story of Hope*. A further analysis of the data, including an in-depth analysis of the stories, may be revealing. The comparison of factor means was helpful in identifying differences in the experience of hope, based on individual variables. However, it would be equally informative to determine the specific, multiple factors that might contribute to the personal experience of hope, through the collection of newer information based on the analysis of story content.

CHAPTER EIGHT

IMPLICATIONS FOR FURTHER INQUIRY

Chapter Eight consolidates the findings from this study, providing a framework for future research directions and clinical pursuits. The first section of this chapter focuses on the implications from the findings. Research and clinical implications, extrapolated from the findings, will be presented. The second section of this chapter focuses on further directions for the refinement and clinical application of the semantic differential research tool.

Implications from the Findings

A Factor Structure for Hope

The identification of a factor structure for *Hope*, based on connotative meaning, has stimulated new thought and raised many questions. A summary of the major findings relating to this factor structure appears in Table 8.1. As highlighted in this table, people experience hope within three interconnected realms of *personal spirit, risk* and *authentic caring*. A number of key components or elements are embedded within each of these realms: for *personal spirit,* the key element is *meaning;* for *risk,* the key elements are *predictability or uncertainty* and *boldness;* and for *authentic caring*, the key elements are *credibility* and *caring*.

The following is an overview of future research and clinical directions, based on these findings. This overview is guided by the following three questions that emerged from the factor structure for *Hope*:

(a) What is the influence of *meaning* on the personal experience of hope?

(b) What is the influence of *uncertainty* on the personal experience of hope?

(c) What is the influence of a *credible, caring relationship* on the personal experience of hope?

Table 8.1

Summary of the Major Findings Based on the Factor Structure for Hope

Factor Structure	**Major Findings**
Three primary factors	People experience hope within three, interconnected realms: *personal spirit* (intrapersonal) *risk* (situational) *authentic caring* (interpersonal)
• *Personal Spirit*	• People predominantly experience hope within the intrapersonal realm of *personal spirit.* • Meaning forms a core element of this realm. • Within this realm, the experience of hope is not compartmentalized. Rather, people experience hope holistically.
• *Risk*	• Within the realm of *risk,* the experience of hope is influenced by the predictability of a situation and the boldness of the person. Predictability in some aspects of a person's life may enhance the individual's willingness to risk.
• *Authentic Caring*	• The experience of hope within relationships is influenced not only by comfort and caring, but also by credibility. Thus, comfort and caring, alone, may not be sufficient for the experience of hope within relationships.

Meaning as a Core Element of Hope

Writers in the hope literature have attempted to delineate a relationship between hope and meaning. There are a number of difficulties in interpreting this literature, however. These difficulties revolve around the use of confusing terminology to describe the concept of meaning. In addition, a variety of perspectives regarding the relationship between hope and meaning have been proposed.

People have used different terminology to capture the essence of meaning. Some have directly referred to the concept through terms such as *purpose and/or meaning in life* (Miller & Powers, 1988; Owen, 1989). Others have alluded to the concept through the use of terms such as *goal attainment* (Stotland, 1969), *world view* (Miller, 1989) and *spiritual strategies* (Miller, 1989). Still others have associated meaning with a religious orientation, using terms such as *religious conviction* (Herth, 1989), *spiritual beliefs* (Nowotny, 1989) or *faith* (Marcel, 1962; Moltmann, 1975). This use of a wide range of terms is confusing to the reader and open to a variety of interpretations.

Not only is the description of the term, *meaning*, confusing. The nature of the relationship between hope and meaning also remains unclear. Many people, studying hope, have attempted to capture this relationship within a causal framework. Terms such as *antecedent to hope* (Haase, Britt, Coward, Leidy, & Penn, 1992; Stephenson, 1991), *hope-inspiring strategy* (Miller, 1989, 1991), *enabler of hope* (Herth, 1993; Farran et al., 1995) and *source of hope* (Fitzgerald, 1979; Herth, 1990) have been used to describe a relationship in which meaning serves as a prerequisite to hope. Others have conceptualized meaning as an *element, attribute, component or subtheme* of hope, using terms such as *purpose and/or meaning in life* (Miller & Powers, 1988; Owen, 1989), *spiritual beliefs* (Nowotny, 1991) and *goal attainment* (Stotland, 1969).

In addition to these different perspectives regarding this relationship, there are differences in the interpretation of previous work on meaning and how it relates to hope. One example is the interpretation of the relationship between hope and Frankl's (1959) work on meaning, based on his experiences in a Nazi concentration camp. Fitzgerald (1979) describes meaning as a source of hope, citing Frankl's work as an example. Paraphrasing Frankl's work, he suggests that "the acquisition of meaning(s) leads to personal fulfilment and hope" (p.250). In contrast, Stephenson (1991) suggests that hope and meaning are equivalent terms, based on Frankl's work. She states that Frankl equated hope with having found meaning in life. Although these differences are subtle, they confuse the reader and perpetuate the lack of clarity regarding this relationship.

As the nature of the relationship between hope and meaning remains unclear, it is surprising that little research has been conducted in this area. In one of the few studies that directly links hope with meaning, Froese (1995) identified the role of hope and purpose in life as important factors in the management of chronic physical pain. This study consisted of two groups of individuals with chronic pain, a treatment group and a control group. People in the treatment group participated in a support group experience that emphasized the importance of finding meaning in suffering. At the end of this group experience, substantial increases in hope and purpose in life were reported, using the Herth Hope Scale and the Purpose in Life Test, respectively. Although the general activity level, as measured by the Multidimensional Pain Inventory, had not changed over time, people in the treatment group reported that they were managing their pain better. In contrast, there were no substantial differences between pre- and post-treatment comparisons of hope or purpose in life in the control group. These findings support the view that a relationship exists between hope and meaning. Further research regarding the nature of this relationship is warranted.

In summary, the findings from this current study suggest that meaning is an integral component of the hope experience. Meaning formed the core element of the *personal spirit* factor for *Hope*. Not only was meaning a core element, however. It was also intricately interconnected with other elements of hope. This interconnected configuration of the *personal spirit* factor suggests that people experience hope holistically. It also supports the view that a causal model may not adequately capture the relationship between hope and meaning. A more pertinent pursuit would be to gain a better understanding of how the experience of hope and meaning are interconnected, within a noncausal framework. These findings raise the following questions for further inquiry:

(a) What is the nature of the relationship between the personal experience of hope and meaning?

(b) How might this relationship be represented within a noncausal framework?

(c) How might this framework capture the personal experience of hope without losing its inherent holistic quality?

These research questions are also important to understand from a clinical perspective. Although the nature of the relationship remains unclear, it raises the question, *If we encourage people to search for meaning in their lives, then what influence will it have on their experience hope?* From a clinical perspective, it may be important to ask the question, *What is meaningful in this person's life?* The attribute, *purpose*, has been included as part of a formal clinical assessment of hope (Farran, Wilken & Popovich, 1992; Farran et al., 1995). Within this assessment framework, *purpose* represents purpose in life or one's religious/spiritual orientation. This particular assessment is quite detailed, however, involving the assessment of a number of areas, other than meaning. Based on the findings from this study, the clinical question relating to meaning might be useful as a primary and predominant form of assessment.

Hope and Uncertainty

A relationship between hope and uncertainty has been addressed either directly or indirectly in the hope literature. In some cases, writers have directly referred to a relationship between uncertainty and hope (Dufault, 1981). In other cases, this relationship may be inferred through the use of terminology that implies some level of uncertainty. Terms such as *anticipation* (Miller & Powers, 1988), *control* (Farran et al., 1995; Miller, 1989; Nowotny, 1991) and *probability of goal achievement* (Stotland, 1969) have been used to describe elements of hope.

Based on these descriptions, the relationship between uncertainty and hope may be represented in a number of different ways. Some have conceptualized this relationship within a causal model, describing uncertainty as an antecedent to hope (Dufault, 1981). The element of uncertainty may be embedded within a precipitating event or an *adversity,* such as an inescapable *trial, captivity* or *suffering* (Fromm, 1968; Marcel, 1962). Others have described uncertainty, or a related term such as anticipation, probability of goal-attainment or control, as a *concomitant* (Dufault, 1981), *element* (Miller & Powers, 1988; Stotland, 1969) or *attribute* of hope (Farran et al., 1995; Miller, 1989; Nowotny, 1991). Although people have alluded to a relationship between hope and uncertainty, the nature of this relationship remains unclear.

There are two opposing streams of thought regarding the nature of the relationship between hope and uncertainty. In one stream, uncertainty is viewed as an inherent part of the experience of hope (Dufault, 1981). To highlight this distinction, people have contrasted hope with expectation, which implies a sense of certainty (Menninger, 1959). In the opposing stream, certainty, as opposed to uncertainty, is conceptualized as an integral component of the hope experience. Korner (1970), for example, has suggested that hope is associated with an *assumed certainty* that the dreaded will not happen, much like the concept of faith. These differences in perspectives support the need for research in this area.

The first stream of thought, in which uncertainty is viewed as an inherent part of hope, is indirectly supported by the research on uncertainty and illness (Suls & Mullen, 1981: Mishel, 1981, 1984, 1988, 1990; Mishel & Braden, 1988; Mishel, Padilla, Grant &Sorenson, 1991). The concept of hope is embedded within Mishel's (1988) theory of uncertainty in illness. Mishel indirectly refers to the role of hope within the illness process, through the appraisal of uncertainty as a danger or an opportunity. If a person appraises a situation as an opportunity, then uncertainty could be conceptualized as an antecedent to hope. In a reconceptualization of her theory, Mishel (1990) emphasizes the importance of integrating the experience of chronic uncertainty as a natural rhythm of life, particularly for people with chronic conditions. By accepting uncertainty as a way of life, people are open to multiple possibilities, which can facilitate coping. Not only is this theory linked to hope and coping, it is also linked to meaning. Mishel uses her theory to explain how people construct meaning of illness events.

The second stream of thought, in which some degree of certainty is viewed as a component of hope, may be indirectly linked to the research conducted by Antonovsky (1979, 1987) on *sense of coherence*. In his second publication on the subject, Antonovsky (1987) redefined *sense of coherence* as follows:

> The sense of coherence is a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of

> living are structured, predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement. (p. 19)

To paraphrase Antonovsky, *sense of coherence* is a general view of the world in which the person believes that challenges in life can be handled and eventually resolved in some, yet to be determined, way. He believes that this *sense of coherence* or how a person constructs reality is a critical factor in coping and health outcome.

Antonovsky (1987) cites other views of health that are similar to his concept of *sense of coherence*. These include research on *hardiness* (Kobasa, 1982), *sense of permanence* (Boyce, Schaefer & Uitti, 1985) and the *vulnerable but invincible*, which is about resiliency in children (Werner & Smith, 1982). It is interesting to note that Antonovsky further suggests that *meaningfulness* is both a motivational and crucial component of the *sense of coherence* concept. Meaning is the driving force that enhances a person's understanding of the world and the resources available to that person.

These two streams of thought present two distinct opposing views regarding the relationship between uncertainty and hope. However, the findings from this study raise the thought of whether or not these two opposing views might be integrated. With respect to researching the relationship between hope and uncertainty, an equally informative area of inquiry relates to the *predictability* component of the *risk* factor. Based on the findings from this study, predictability in some aspects of a person's life may enhance a willingness to risk. If a person is experiencing a great deal of uncertainty in some aspects of life, such as the illness experience, then are there other areas in a person's life that are more predictable? How might these predictable elements influence a person's willingness to risk? Both Mishel (1988, 1990) and Antonovsky

(1979, 1987) have linked their theories with coping. The link between uncertainty, sense of coherence and coping raises a further question, *How might a balance between uncertainty and predictability assist a person in coping with the illness experience?*

Given the divergent views regarding the relationship between uncertainty and hope, further research is warranted in this area. Two questions are posed for further inquiry: *(a) What is the nature of the relationship between hope and uncertainty?* and *(b) How might Antonovsky's concept of sense of coherence relate to uncertainty and hope?* It is also fascinating to note that meaning was an integral component of both Mishel's (1988, 1990) theory of uncertainty in illness and Antonovsky's (1979, 1987) conceptualization of *sense of coherence.* These observations point to a third question of inquiry, specifically, *How might the concepts of hope, uncertainty, sense of coherence and meaning be inter-related?*

These findings also raise a number of questions for reflection and application within the clinical arena. The illness experience is marked by a "roller coaster ride" along a continuum of uncertainty. There are many aspects of this experience that are beyond the patient's and often, the caregiver's control. Based on the findings relating to *risk,* predictability in certain aspects of a person's life may enhance a willingness to risk, which is an inherent component of hope. This willingness to risk may facilitate coping with the uncertainty in other aspects of life, such as the illness experience. From a clinical perspective, the following questions would be useful in assessing the realm of *risk*, as part of a patient's hope experience:

(a) *What is this person's tolerance for uncertainty?*

(b) What are the predictable elements in this person's life?

(c) How is this person's tolerance for uncertainty of the illness experience related to how this person views the world?

Hope and Authentic Caring

The relationship between hope and caring has been described from a number of perspectives. For people studying the concept of caring, hope has been embedded within this framework (Forrest, 1989; Mayeroff, 1971; Watson, 1979). In contrast, people who are actively engaged in researching hope see caring as an integral component of the hoping process (Jevne, 1991,1993). Regardless of the perspective, the element of credibility, as an essential component of caring, has not been addressed. From a research perspective, it raises the question, *How might the concept of credibility be integrated within the research on caring and hope?* From a clinical perspective, the following questions are raised for further reflection as a caregiver: *(a) Who authentically cares about this patient?* and *(b) How might my credibility, as a caregiver, influence this patient's experience of hope?*

Summary

A summary of the research and clinical implications appears in Table 8.2. As shown in the table, a fundamental question emerged from the findings: *How do the three interconnected realms of personal spirit, risk and authentic caring influence one another?* Based on the findings from this research and a secondary literature review, the concepts of meaning, uncertainty, sense of coherence, credibility and caring have been linked to the construct of hope. The link between hope and some of these concepts is supported in the hope literature. Interpretation of the literature is impeded, however, by confusing terminology and a tendency to capture relationships within a causal framework.

Research needs to be directed towards gaining a better understanding of the interconnectedness of these concepts. To gain a better understanding of these relationships, people working in different, yet related fields of interest need to combine forces. Research in a specific field of interest resembles the Gestalt experience of

Table 8.2

Research and Clinical Implications from the Findings of a Factor Structure for the Concept. *Hope*

Major Findings	Research Implications	Clinical Implications
People experience hope within three, interconnected realms of *personal spirit, risk & authentic caring.*	How do the three interconnected realms of *personal spirit, risk and authentic caring* influence one another?	How do the realms of *personal spirit, risk and authentic caring* inform us about the patient's experience of hope?
• *Personal Spirit*	• What is the nature of the relationship between hope and *meaning*? • How might this relationship be represented within a noncausal framework? • How might this framework capture the experience of hope without losing its inherent holistic quality?	• If we encourage people to search for meaning in their lives, then what influence will it have on their experience of hope? • What is meaningful in this person's life?
• *Risk*	• What is the nature of the relationship between hope and *uncertainty*? • How might Antonovsky's concept of *sense of coherence* relate to uncertainty and hope? • How might the concepts of hope, uncertainty, sense of coherence and meaning be inter-related?	• What is this person's tolerance for uncertainty? • What are the predictable elements in this person's life? • How is the person's tolerance for uncertainty of the illness experience related to how this person views the world?
• *Authentic Caring*	• How might the concept of *credibility* be integrated within the research on *caring* and hope?	• Who authentically cares about this person? • How might my credibility, as a caregiver, influence this person's experience of hope?

figure and ground: A particular research area is raised to the foreground, while all other related areas recede into the background. As researchers, we need to pay as much attention to the background as to the foreground, to move beyond the obvious. We need to ask ourselves the question, *"What is missing or not being studied?"*, as often as we ask ourselves, *"What is most notable about these findings?"*.

There are a number of more global questions that this study has raised:

(a) Who else is moving in the same direction of research?

(b) What is the big picture? Is there a higher-order principle connecting the concepts of hope, meaning, uncertainty, sense of coherence, caring and credibility?

(c) Could meaning be part of this higher order principle?

(d) Is there a way to map out the interconnectedness of these concepts, without implying causality? Could the semantic differential be used in this way?

Comparison with Other Hope-Related Concepts

Some additional research and clinical implications may be drawn from the comparison of hope-related concepts. Two major findings emerged from this comparison. First, the experience of losing hope is qualitatively different from the experience of hope, which may include the process of restoring or maintaining hope. Second, the intrapersonal experience of hope may be qualitatively different from the interpersonal experience of hope. Although qualitatively different, these two experiences are intricately interconnected.

These findings raise the following questions for further research inquiry:

(a) What is the structure for the experience of losing hope?

(b) How is the personal, qualitative experience of hope different from the quantitative view of hopefulness and hopelessness?

(c) What is the structure for the experience of hope in relationships?

(d) How might the semantic differential be used to research the interpersonal experience of hope within relationships as opposed to the intrapersonal experience of hope?

Within the clinical setting, the semantic differential could be used to assess different experiences of hope. From a patient's perspective, a person's qualitative experience of hope could be followed over time. It would be particularly important to monitor this experience during times of adversity, when hope may be challenged. From a caregiver's perspective, the semantic differential could be used to assess the experience of hope, within both a professional and personal context. This tool could also be applied to the interpersonal experience of hope within the patient-caregiver relationship.

Comparison of Health and Illness Experiences

The comparison of health and illness experiences raised some important questions for further reflection. These questions are summarized in Table 8.3. As shown in this table, these questions revolve around the influence of a number of variables on the personal experience of hope. These variables include the *professional caregiver role, age, gender, stress factors, health status, illness experience* and *nursing experience.* These questions may be applied to further research inquiry, as well as within the clinical setting.

One additional finding that emerged from this comparison was the greater number of significant differences for the specific concepts, as opposed to the more general concepts. This finding reinforces the view that specific stories, embedded within the context of illness or adversity, are an effective means for accessing the personal experience of hope. This finding has important implications for developing innovative ways of researching hope, as well as for understanding hope within the clinical setting.

Table 8.3

Questions for Further Reflection Derived from the Factor Mean Comparisons of Different Health and Illness Experiences

Variable	Questions for Reflection
Health vs. Illness vs. Professional Caregiver Experience	• What is the relationship between the professional role of the caregiver and the personal experience of hope?
Age	• How might a person's age influence the personal experience of hope?
Gender	• How might gender influence the personal experience of hope?
Stress Factors	• What is the influence of negative life experiences, such as relationship difficulties, financial difficulties and assault, on the personal experience of hope? • How do some people maintain a sense of hope, in spite of these negative life experiences, while others do not? • How might the stress factors of family health or personal loss influence the personal experience of hope?
Health Status	• How are the concepts of health and illness defined in terms of hope? • How is a person's experience of hope affected by changes in health status? • How does a person's perception of health status influence the personal experience of hope?
Illness Experience	• How does the severity and chronicity of the illness experience influence the personal experience of hope for patients and caregivers? • What is the influence of the cancer experience on the personal experience of hope? • What is the influence of a physical assault, like illness, early in life, on the personal experience of hope?
Nursing Experience	• What is the influence of nursing experience on the personal experience of hope?

It speaks to the importance of using narrative as a tool of clinical and empirical inquiry, as well as a potential hope-enhancing strategy (Jevne, 1993, 1994).

Refinement of the Research Tool

The semantic differential for hope was initially developed as an exploratory tool to structure the domain of hope. This tool can be used for further exploration to enhance its reliability and validity. It can also be adapted for use within the clinical setting. To enhance its utility, there are a number of suggestions for further tool development:

(a) The refined research tool, consisting of 24 variables, should be retested on a similar population of health, illness and nursing, to determine whether or not the factor structure for *Hope* is retained. This testing could include the original six hope-related concepts. It could also be expanded to include other hope-related concepts that were not included in the original study.

(b) Other hope-related concepts could be developed for further assessment. Within the original study, these concepts were limited to either a phrase or a story about hope. They also represented different forms of hope, including the description of *hope as noun, as an adjective and as a process.* Some people have drawn distinctions between hope and the process of hoping. Further evaluation of these different descriptions of hope may be warranted, including the use of *hope as a verb.* Potentially, hope-related concepts, involving other media such as art or music, could be developed.

(c) Given the qualitative differences in the factor structures for some of the concepts, the data could be re-analyzed. Factor structures for concepts representing the experience of *losing hope* could be identified from the original pool of 50 variables. It would also be interesting to determine whether or not the structures representing the experience of *hope in relationships,* derived form the 50 variables, would vary significantly from the factor structure for *Hope*. It may also be important to re-analyze the personal stories of hope, based on specific factors embedded within the stories, themselves.

(d) This tool should be tested on a larger population base, taking into account such factors as *health and illness experience, education level and gender.* The semantic differential was initially tested on a sample representing the three populations of health, illness and nursing. These populations could be expanded to include forms of adversity apart from illness, more specific types of illness experience, and caregiver groups other than nursing. The overall education level of this sample was approximately 4 years of advanced education. It would be important to test this tool on people with lower levels of education, to determine whether or not education level influences the experience of hope. Similarly, with respect to gender, the gender distribution of the sample was approximately 85% females and 15% males. Further testing of this tool with a more representative gender distribution would be warranted, to assess the influence of gender on hope.

(e) This tool could be adapted for use within the clinical setting. The refined tool, consisting of the 24 adjective pair scales, could be used to assess the clinical experience of hope. Some examples might include using the tool to assess the caregiver-patient relationship, to develop specific hope-enhancing strategies or to rate potential stories or images of hope. Other uses include monitoring a person's experience of hope over time or using the semantic differential as an evaluation tool, for example, within a workshop setting.

Summary

This study has sparked new thought and opened new doorways into the exploration of hope. The findings suggest that the experience of hope is a holistic, interconnection of personal spirit, risk and authentic caring, grounded by a core theme of meaning. Many questions have emerged from these findings, providing a framework for further inquiry. The semantic differential offers promise as an effective empirical and clinical tool for exploring hope, through further development and refinement. It is hoped that this study will serve as a catalyst for further exploration, as people continue to search for the elusive answer to the question, *What does hope mean to you?*

EPILOGUE

DISPELLING THE MYTHS

Regardless of method, there is both a process and an outcome component to each research study. All too often, we focus on the outcome, the finished product. The material is tightly woven within a polished framework. There are no rough edges or loose threads. Yet, we have little, if any understanding, about the process of the research experience, itself. This research study was no exception. Throughout the writing of this final paper, I was reminded of the many challenges that I had encountered as part of the research process. The following is a glimpse into some of the challenges of this research experience.

In many ways, this experience was similar to travelling through a maze. I always had an end point in mind, but the path was not straight nor certain. At times, I encountered blocked or tangential pathways along the way. As frustrating as some of these encounters were, I soon came to realize that the blocks and the tangents were equally as important as the end point, itself. Although I was not always sure of the direction in which I was moving, I never felt totally lost. I was guided by a deep sense of trust - from my supervisors who believed in me, from the participants who valued the research experience and from within myself.

As I travelled through this maze, I encountered a recurring theme of *going against the flow*. Six years ago, when I embarked on a qualitative research study for my Master's thesis, I had a similar experience. At that time, I was choosing a research design that was not universally accepted, particularly by my former colleagues who were steeped in the scientific, medical model. Now, six years later, I am experiencing the same type of dissonance. This time, however, I feel I am part of a minority, researching an intangible using a quantitative method. Most of my current colleagues are immersed in the qualitative paradigm of inquiry.

Intertwined with this theme of *going against the flow* was a second theme, *dealing with the dichotomies*. Throughout this experience, I was confronted with the dichotomies that exist between quantitative and qualitative researchers. Fellow researchers responded to this study in different ways. Comments such as *"I don't think that way"* and *"I guess those are the limitations of a research questionnaire"* have stood out over time. Other comments that I received from some of the participants, however, offered a different perspective. This is one participant's response to reading *Dave's Story:*

> This sounds like my story......Dave and I should both be dead by now. But we aren't and don't expect to be. Acceptance is part of hope. I know I may die, but I hope (and expect) to beat the odds, at least for a time.

This is another participant's response to her personal story of hope:

> This last four months, I have been the less [least] hopeful in all my life. My hope and my faith in life are questioned.....After doing this [questionnaire], I realize that my hope is truly challenged. I would like to [do it] again in 3 to 6 months, if possible.

These threads of hope kept me going, at times when I felt very disconnected from most of my peers.

This experience has raised some very important questions about how research is perceived. It also speaks to some of the myths and artificial dichotomies that have divided the quantitative and qualitative fields of research. These are some of the myths that I encountered during my research experience:

Myths About Quantitative Research

- Quantitative research is neat and tidy.
- Quantitative research is exact and precise.
- Quantitative research is tedious and boring.
- Quantitative research is about proving hypotheses. It is a way of substantiating what you already believe.
- Once you have identified your question and developed a research design, the rest of the research is easy.
- It is easy to collect data using a quantitative research design.
- Data analysis is quick and well-defined.
- Quantitative researchers are objective and emotionally detached from the research.

This research study was not neat and tidy. Nor was it exact and precise. I faced many challenges in accessing the sample, collecting the data and interpreting the findings. The sample was difficult to access because of its diversity. Data collection was a tedious process, but was facilitated by the help of many people. There were no well-defined rules to follow when it came to analyzing the data and interpreting the findings. Being guided by the data, however, I was fascinated by the discovery of totally different results than what I had expected. As a researcher, I did not see myself as a detached observer. I was emotionally committed to the research and connected to the many participants, who so freely shared their own perspectives and struggles of hope. This study consumed a large part of my waking hours, as well as my sleeping hours. Many times I was awakened during the night by an inspirational thought that I hurriedly scribbled on paper before it was lost amidst my nighttime stupor. As I approach the end, my commitment lingers: I am having difficulty letting go of an extremely rewarding research experience.

As I reflect on this experience, I realize that there was a complementary, concurrent process, interwoven throughout this research: my own personal experience of hope. This experience can be captured within the interconnected realms of *personal spirit, risk* and *authentic caring*:

My Personal Experience of Hope

Personal Spirit

- looking beyond the obvious
- being open to new ways of seeing and doing things
- persevering, in spite of the blocks
- knowing my "bottom line"
- being resilient
- taking time for reflection and re-energizing
- being fascinated by the process of discovery

Risk

- daring to be different by using a quantitative technique to explore a qualitative experience
- taking risks by presenting my research for public scrutiny
- balancing the uncertainty of the outcome with the predictability of having well-grounded data

Authentic Caring

- making meaningful connections
- accessing resources and establishing networks
- trusting in myself, in others and in the process

At times, when my own sense of personal spirit was waning, I sought out people who supported and believed in me and my work - my supervisors, Dr. Ronna Jevne and Dr. Tom Maguire, my husband, Bill, and a few close friends who encouraged me to keep going. It was their support that enabled me to take risks and to persevere, when giving up would have been an easier and tempting option.

The dichotomies between quantitative and qualitative research continue to fascinate me. I have experienced my own inner struggle with these two distinct perspectives of inquiry. Many times I have thought how much easier it would be if I were to choose one discipline over the other. Instead, I have chosen to occupy the *space between* quantitative and qualitative research, similar to the view of hope as the *space between* the dichotomies of life (Jevne, 1994). Having done research in both the quantitative and qualitative fields, I have come to appreciate the strengths, and respect the limitations, of both research paradigms. The future of hope research depends on an openness to different perspectives and methods of inquiry.

Research can be a humbling experience. One of my goals for the doctoral program was to strengthen my research base, becoming knowledgeable in both the quantitative and qualitative methods of inquiry. I have come to realize how much more there is to learn in both of these research fields. I have, however, gained a broader base from which to build this knowledge. By building on these experiences, I hope to continue to pursue research within both of these paradigms and to dispel the myths that have long divided these two fields of inquiry.

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APPENDIX A

Hope-Related Adjective Pairs

Table A.1

Fifty Polar Adjective Pairs Selected for the Hope Research Tool

Adjective Pair	**Adjective Pair**
positive-negative	valuable-worthless
warm-cold	forward-backward
honest-dishonest	inward-outward
*trusting-mistrusting**	certain-uncertain
realistic-unrealistic	perfect-imperfect
tender-tough	near-far
optimistic-pessimistic	*expected-unexpected**
*confronting-withdrawing**	hard-soft
*accepting-rejecting**	desirable-undesirable
helpful-harmful	possible-impossible
happy-sad	bright-dull
*connected-disconnected**	precise-imprecise
free-*constrained**	fast-slow
light-dark	fearless-fearful
confident-unsure	strong-weak
daring-cautious*	broad-narrow
active-passive	aware-unaware
believable-unbelievable	*caring-uncaring**
*leading-following**	stable-unstable
*opening-closing**	patient-impatient
*winning-losing**	*empowering-disabling**
*enhancing-inhibiting**	meaningful-meaningless
light-heavy	*joining-separating**
good-bad	colorful-colorless
essential-frivolous	improbable-probable

*Note. The words in italics are classified grammatically as *participles,* which are a form of verb. Participles may also function as adjectives, however, depending on the context in which they are used.

Table A.2

Adjective Pairs Representing Osgood's Semantic Differential Factors of Evaluation, Potency and Activity (Osgood et al., 1957)

Factor	**Adjective Pair**
Evaluation	good-bad valuable-worthless honest-dishonest
Potency	hard-soft strong-weak heavy-light
Activity	active-passive fast-slow warm-cold*

* The adjective pair, *hot-cold*, used in Osgood et al.'s (Osgood & Suci, 1955; Osgood et al., 1957) original work, was changed to *warm-cold*, for the Hope Research Study.

Table A.3

Adjective Pairs Representing the Six Dimensions of Dufault and Martocchio's (1985) Hope Model

Hope Dimension	**Adjective Pair**
Affective	happy-sad fearful-fearless patient-impatient
Behavioral	daring-cautious leading-following confronting-withdrawing
Cognitive	realistic-unrealistic believable-unbelievable certain-uncertain
Affiliative	connected-disconnected joining-separating inward-outward
Temporal	near-far forward-backward
Contextual	free-constrained opening-closing

APPENDIX B

Hope-Related Concepts

CONCEPT 1

HOPE

I would like you to think about the word, "hope." What does the word "hope" mean to you?

CONCEPT 2

A HOPEFUL PERSON

How would you describe a hopeful person?

CONCEPT 3

A PERSON WITHOUT HOPE

How would you describe a person without hope?

CONCEPT 4 (version 1)

DAVE'S STORY (version 1)

Dave was a successful businessman who really enjoyed his work. He had never been sick a day in his life and, at age 52, he was feeling very satisfied with his career.

One day, Dave noticed an unusual lump in his neck. He went to see his family doctor who referred him to a surgeon. Dave was immediately scheduled for surgery and was found to have a serious cancer. He was told by his surgeon that he had a *very* poor chance of surviving. *The surgeon told Dave to book an appointment to see him in a "couple of weeks."*

Shortly after coming back from the operating room, Dave was out of his room making himself some tea. *Dave's nurse, who was supposed to be caring for him around the clock, came looking for him. When she found Dave, stooped over the counter, stirring his tea, she angrily said, "What are you doing here? You're supposed to be in bed!"*

Dave quickly replied, with a stern look on his face. "I want that "chemo" [cancer medication]! You know what they do when they sew you up? They look at it and sew you up and send you back to die. I'm not ready to die! The surgeon told me to come back in two weeks. They'll be bringing me back in a box in two weeks. I want that "chemo" and I want it now!"

Throughout his cancer treatments, Dave insisted on driving himself to the hospital. Both he and his wife were unwilling to accept the fact that he might die. He trusted his physicians and was very pleased with the care he received. He often spoke of his desire to see his grandchildren grow up and marry.

Five years after the initial diagnosis of cancer Dave is still alive.

Note: Italicized words indicate the differences in wording between versions 1 and 2.

CONCEPT 4 (version 2)

DAVE'S STORY (version 2)

Dave was a successful businessman who really enjoyed his work. He had never been sick a day in his life and, at age 52, he was feeling very satisfied with his career.

One day, Dave noticed an unusual lump in his neck. He went to see his family doctor who referred him to a surgeon. Dave was immediately scheduled for surgery and was found to have a serious cancer. He was told by his surgeon that he had a *relatively* poor chance of surviving. *The surgeon told Dave to book an appointment to see him in a "couple of weeks," so that they could talk about treatment options.*

Shortly after coming back from the operating room, Dave was out of his room making himself some tea. *Dave's nurse came looking for him and found him, stooped over the counter, stirring his tea. She said, "What are you doing here? You're supposed to be in bed."*

Dave quickly replied, "I want that "chemo" [cancer medication]! You know what they do when they sew you up? They look at it and sew you up and send you back to die. I'm not ready to die! The surgeon told me to come back in two weeks. They'll be bringing me back in a box in two weeks. I want that "chemo" and I want it now!"

With further medical consultation, Dave was started on chemotherapy. Throughout his cancer treatments, Dave continued to work, despite not always feeling well. Both he and his wife were unwilling to accept the fact that he might die. He trusted his physicians and was very pleased with the care he received. He often spoke of his desire to see his grandchildren grow up and marry.

Five years after the initial diagnosis of cancer Dave is still alive.

Note: Italicized words indicate the differences in wording between versions 1 and 2.

CONCEPT 5 (version 1)

KAREN'S STORY (version 1)

Karen, a 42 year old woman with breast cancer, was in a hospital for *dying patients. She was not receiving any treatment* as her cancer was spreading. Although she was quite weak and needed help to get out of bed, she had a cheerful attitude and liked to joke with the nurses. Karen was looking forward to getting back some of her strength, as she eventually wanted to go back home to be with her husband and 15 year old son.

One day, Karen talked to her nurse about being in hospital.

> "The reason I'm in here, in hospital, is that I believe there's that, what would you say....rainbow out there. And if I take my medication, I do what I'm supposed to do....If I can go through the process of sitting, standing and walking....and get well, which I think I will, then fine. But if I've come in here with the idea that I'm going to die, then why am I here? I've come here with the idea of getting better which I intend to do. You just never give up that rainbow. If you give up that, then there's no point. You may as well stay home and take your pills or not take your pills at all."

The nursing staff were concerned that Karen was not aware of the seriousness of her illness and that she was dying. A nurse came in to talk to her about her "end-stage" disease.

Karen was very upset after the discussion with the nurse. She became quite depressed and did not feel like doing anything. *She later confronted the nurse by saying,* "Do you realize that when you used the word, "end-stage," you took away all of my reason for living?"

Karen died two weeks later.

Note: Italicized words indicate the differences in wording between versions 1 and 2.

CONCEPT 5 (version 2)

KAREN'S STORY (version 2)

Karen, a 42 year old woman with breast cancer, was in a hospital for *control of her symptoms. She was receiving treatment for her pain,* as her cancer was spreading. Although she was quite weak and needed help to get out of bed, she had a cheerful attitude and liked to joke with the nurses. Karen was looking forward to getting back some of her strength, as she eventually wanted to go back home to be with her husband and 15 year old son.

One day, Karen talked to her nurse about being in hospital.

> "The reason I'm in here, in hospital, is that I believe there's that, what would you say....rainbow out there. And if I take my medication, I do what I'm supposed to do....If I can go through the process of sitting, standing and walking....and get well, which I think I will, then fine. But if I've come in here with the idea that I'm going to die, then why am I here? I've come here with the idea of getting better which I intend to do. You just never give up that rainbow. If you give up that, then there's no point. You may as well stay home and take your pills or not take your pills at all."

The nursing staff were concerned that Karen was not aware of the seriousness of her illness and that she was dying. A nurse came in to talk to her about her "end-stage" disease.

Karen was very upset after the discussion with the nurse. She became quite depressed and did not feel like doing anything. *She later told the nurse,* "Do you realize that when you used the word, "end-stage," you took away all of my reason for living?"

Karen died two weeks later.

Note: Italicized words indicate the differences in wording between versions 1 and 2.

CONCEPT 6

A PERSONAL STORY OF HOPE

Think of a time in your life when your own hope was very much challenged. This may be a personal experience or it may be an experience of another individual. Briefly describe this experience in the space provided.

APPENDIX C

Research Questionnaire

The Meaning of Hope: An Exploratory Study

Cheryl Nekolaichuk, M.Ed., Doctoral Candidate
The Department of Educational Psychology
6-102 Education North
The University of Alberta
Edmonton, Alberta
T6G 2G5

Dear Study Participant:

The concept of hope is a commonly used term in every day life. In spite of its common usage, however, hope is a word which is difficult to define. The purpose of this study is to gain a better understanding of the meaning of hope. We are interested in finding out what hope means to you as an individual. You will be asked to complete some background information about yourself and then to rate a number of different hope-related phrases and stories against a series of scales. Your responses will be based on your personal opinion about hope.

If you are interested in participating in this study, please complete the attached questionnaire. If there are any questions which you are not comfortable answering, you can disregard them. Your participation in this study is voluntary and you will not be required to identify yourself. Please return the completed questionnaire using the enclosed stamped, self-addressed envelope.

If you are interested in the findings from this study, you can contact me by mail at the address at the top of this page. I would like to take this opportunity to thank you for your interest and willingness to participate in this study.

Sincerely,

C Nekolaichuk

Cheryl Nekolaichuk, M.Ed.
Doctoral Candidate
Department of Educational Psychology

This research is being carried out under the supervision of Dr. R. F. Jevne and Dr. T. Maguire, Department of Educational Psychology, The University of Alberta.

The Meaning of Hope: An Exploratory Study
Background Information

A. Gender: 1. Male: ____ 2. Female: ____

B. Age: _________

C. Marital Status:

1. Single _____
2. Married _____
3. Divorced _____
4. Widowed _____
5. Other _____

D. Level of Education:

1. What level of education do you have?

   (a) Less than Grade 12 Education ______
   (b) High School Diploma ______
   (c) Post High School Training ______

2. If you have received training beyond a Grade 12 Education, then please answer the following questions:

   (a) How many years of advanced training do you have? _______

   (b) What type of training have you received? Please mark the levels and type of training that you have received.

	Yes	Please specify type of training
(1) Technical school training	______	____________________
(2) College degree	______	____________________
(3) University degree	______	____________________
(4) Postgraduate degree	______	____________________
(5) Other	______	____________________

E. Work Experience:

1. What is your present work status?

   (a) Employed: Full-time _____
   Part-time _____
   (b) Unemployed _____
   (c) Seeking Employment _____
   (d) Retired _____
   (e) Other (specify) _____

2. What type of work do you do? If you are retired, then please describe the type of work you did before your retirement.

   ____

3. If you are (or were) working as a health care provider, then please answer the following questions:
   (a) How long have (or had) you been working as a health care provider? _____
   (b) With which type(s) of patients do (or did) you primarily work? ___________
   ____

F. Experience as a Patient:

1. How would you rate your current level of health?

    (a) Excellent _____
    (b) Very Good _____
    (c) Good _____
    (d) Fair _____
    (e) Poor _____

2. Have you ever had any of the following types of illness?

	Yes	No	If yes, please specify type of illness:
(a) Serious illness	_____	_____	_____
(b) Life-threatening illness	_____	_____	_____
(c) Chronic illness	_____	_____	_____

3. Have you experienced other stressful, possibly life-threatening, events, which were not necessarily illness-related? Yes _____ No _____

    If yes, then please specify:

G. Experience as a Non-Professional Caregiver:

1. Do you have any experience of providing care as a non-professional caregiver?
    Yes _____
    No _____

2. If yes, then please answer the following questions:

    a. What was your role as a caregiver?
        (1) Spouse _____
        (2) Family member (specify) _____
        (3) Friend _____
        (4) Volunteer _____
        (5) Other (specify) _____

    b. Please describe the type of care which you have provided as a non-professional caregiver.

The Meaning of Hope: An Exploratory Study

Developed by
Cheryl Nekolaichuk, M.Ed., Doctoral Candidate
Department of Educational Psychology
The University of Alberta

INSTRUCTIONS

The purpose of this study is to explore the ***meaning of hope*** from a personal perspective. We are interested in finding out what ***hope*** means to you.

This questionnaire contains six different phrases or stories about hope. You will be asked to share your personal view about hope by rating each phrase or story, at the top of the page, against a set of scales beneath it. You are to rate the phrase or story on each of these scales in order. For the first five items, a hope phrase or story will be provided for you. For the last item, you will be given an opportunity to describe and rate a personal experience of hope. If, for any reason, you do not wish to answer a question, then you are free to leave it out.

Please mark your responses based on your ***personal and immediate reaction*** to each hope phrase or story. It is important that you work quickly and that you do not spend a lot of time on any particular item. We are most interested in your ***first impressions.***

This is not an easy task. It is often easier to give a response after you have thought about it, rather than your first impression, but it is your ***immediate reaction*** that we are interested in. To help you in completing this questionnaire, you may want to keep the following thoughts in mind. As individuals, we each have our own opinions or reactions to specific stories. For example, think about a recent article in a newspaper that you have read or a movie that you have seen. How did you react to it? What were some of your first impressions? As you are completing the questionnaire, please give your ***personal reaction or first impressions*** only.

On the next two pages, there are two examples to help you understand how to complete the remainder of the questionnaire.

Example #1:

I would like you to think about the word, "mother." What does the word "mother" mean to you?

If your personal meaning of the word, "mother," is ***very closely related*** to one or the other end of the scale, then you should place your check-mark as follows:

positive _✓_ : ___ : ___ : ___ : ___ : ___ : ___ negative

or

positive ___ : ___ : ___ : ___ : ___ : ___ : _✓_ negative

By marking the scale in this way, your description of the word, "mother," is either **very positive** or **very negative.**

If your personal meaning of the word, "mother," is ***quite closely related*** to one or the other end of the scale, but not extremely, then you should place your check-mark as follows:

active ___ : _✓_ : ___ : ___ : ___ : ___ : ___ passive

or

active ___ : ___ : ___ : ___ : ___ : _✓_ : ___ passive

By marking the scale in this way, your description of the word, "mother," is either **quite active** or **quite passive.**

If your personal meaning of the word, "mother," is ***only slightly related*** to one side as opposed to the other side, but is not really neutral, then you should check as follows:

valuable ___ : ___ : _✓_ : ___ : ___ : ___ : ___ worthless

or

valuable ___ : ___ : ___ : ___ : _✓_ : ___ : ___ worthless

By marking the scale in this way, your description of the word, "mother," is either **slightly valuable** or **slightly worthless.**

If your personal meaning of the word, "mother," is ***neutral*** on the scale, that is, that either both sides of the scale are ***equally associated*** with the word, or that the scale is ***completely irrelevant,*** and unrelated to the word, then you should place your check-mark in the middle space as follows:

realistic ___ : ___ : ___ : _✓_ : ___ : ___ : ___ unrealistic

By marking the scale in this way, your description of the word, "mother," is **neither realistic** or **unrealistic** or is **equally realistic and unrealistic.**

Example #2:
A man, who is on vacation, places his wallet on the top of the car as he and his family are getting ready for a day of sight-seeing. The family is in a hurry to leave. Amidst all of the commotion, the man forgets about the wallet and drives off. Shortly after, a husband and wife walk by and notice the forgotten wallet on the pavement. As they flip through the wallet, which has a considerable amount of money in it, they find a hotel receipt. The couple phone the hotel and find that the man is a registered guest. They leave a message for the man to call them. The wallet is eventually returned to the man by the couple.

If you had read this story in a newspaper, what would be your reaction? Please mark your responses based on your personal reaction to the story. Your first impression is important.

If your reaction to this story is ***very closely related*** to one or the other end of the scale, then you should place your check-mark as follows:

positive _✓_ : ___ : ___ : ___ : ___ : ___ : ___ negative

or

positive ___ : ___ : ___ : ___ : ___ : ___ : _✓_ negative

By marking the scale in this way, your reaction to this story is either **very positive** or **very negative.**

If your reaction to this story is ***quite closely related*** to one or the other end of the scale, but not extremely, then you should place your check mark as follows:

active ___ : _✓_ : ___ : ___ : ___ : ___ : ___ passive

or

active ___ : ___ : ___ : ___ : ___ : _✓_ : ___ passive

By marking the scale in this way, your reaction to this story is either **quite active** or **quite passive.**

If your reaction to this story seems ***only slightly related*** to one side as opposed to the other side, but is not really neutral, then you should check as follows:

desirable ___ : ___ : _✓_ : ___ : ___ : ___ : ___ undesirable

or

desirable ___ : ___ : ___ : ___ : _✓_ : ___ : ___ undesirable

By marking the scale in this way, your reaction to this story is either **slightly desirable** or **slightly undesirable.**

If your reaction to this story is ***neutral*** on the scale, that is, if both sides of the scale are ***equally associated*** with the experience, or if the scale is ***completely irrelevant,*** unrelated to the story, then you should place you check-mark in the middle space as follows:

realistic ___ : ___ : ___ : _✓_ : ___ : ___ : ___ unrealistic

By marking the scale in this way, your reaction to this story is **equally realistic and unrealistic** OR is **neither realistic nor unrealistic.**

Please keep the following thoughts in mind as you are completing the scales:

1. *Be sure to check every scale. Do not omit any.*
2. *Place only one check-mark on a single scale.*
3. *Sometimes you may feel as though you have had the same item before. This will not be the case, so do not look back and forth through the items.*
4. *Do not try to remember how you checked similar items earlier.*
5. *Make each item a* ***separate and independent judgment****.*
6. *Work at a fairly high speed. Do not worry or puzzle over individual items. It is your* ***first impressions*** *about the items that we want.*

HOPE

I would like you to think about the word, *"hope."* What does the word *"hope"* mean to you?

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
negative	____	: ____	: ____	: ____	: ____	: ____	: ____	positive
cold	____	: ____	: ____	: ____	: ____	: ____	: ____	warm
honest	____	: ____	: ____	: ____	: ____	: ____	: ____	dishonest
trusting	____	: ____	: ____	: ____	: ____	: ____	: ____	mistrusting
realistic	____	: ____	: ____	: ____	: ____	: ____	: ____	unrealistic
tender	____	: ____	: ____	: ____	: ____	: ____	: ____	tough
pessimistic	____	: ____	: ____	: ____	: ____	: ____	: ____	optimistic
confronting	____	: ____	: ____	: ____	: ____	: ____	: ____	withdrawing
accepting	____	: ____	: ____	: ____	: ____	: ____	: ____	rejecting
helpful	____	: ____	: ____	: ____	: ____	: ____	: ____	harmful
sad	____	: ____	: ____	: ____	: ____	: ____	: ____	happy
connected	____	: ____	: ____	: ____	: ____	: ____	: ____	disconnected
free	____	: ____	: ____	: ____	: ____	: ____	: ____	constrained
light	____	: ____	: ____	: ____	: ____	: ____	: ____	dark
unsure	____	: ____	: ____	: ____	: ____	: ____	: ____	confident
daring	____	: ____	: ____	: ____	: ____	: ____	: ____	cautious
active	____	: ____	: ____	: ____	: ____	: ____	: ____	passive
believable	____	: ____	: ____	: ____	: ____	: ____	: ____	unbelievable
following	____	: ____	: ____	: ____	: ____	: ____	: ____	leading
closing	____	: ____	: ____	: ____	: ____	: ____	: ____	opening
winning	____	: ____	: ____	: ____	: ____	: ____	: ____	losing
inhibiting	____	: ____	: ____	: ____	: ____	: ____	: ____	enhancing
heavy	____	: ____	: ____	: ____	: ____	: ____	: ____	light
good	____	: ____	: ____	: ____	: ____	: ____	: ____	bad
essential	____	: ____	: ____	: ____	: ____	: ____	: ____	frivolous
worthless	____	: ____	: ____	: ____	: ____	: ____	: ____	valuable

..../continued on next page

HOPE (continued)

What does the word *"hope"* mean to you?

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
forward	____	____	____	____	____	____	____	backward
inward	____	____	____	____	____	____	____	outward
uncertain	____	____	____	____	____	____	____	certain
perfect	____	____	____	____	____	____	____	imperfect
near	____	____	____	____	____	____	____	far
expected	____	____	____	____	____	____	____	unexpected
hard	____	____	____	____	____	____	____	soft
desirable	____	____	____	____	____	____	____	undesirable
possible	____	____	____	____	____	____	____	impossible
dull	____	____	____	____	____	____	____	bright
imprecise	____	____	____	____	____	____	____	precise
fast	____	____	____	____	____	____	____	slow
fearless	____	____	____	____	____	____	____	fearful
weak	____	____	____	____	____	____	____	strong
broad	____	____	____	____	____	____	____	narrow
aware	____	____	____	____	____	____	____	unaware
uncaring	____	____	____	____	____	____	____	caring
stable	____	____	____	____	____	____	____	unstable
patient	____	____	____	____	____	____	____	impatient
empowering	____	____	____	____	____	____	____	disabling
meaningless	____	____	____	____	____	____	____	meaningful
joining	____	____	____	____	____	____	____	separating
colorful	____	____	____	____	____	____	____	colorless
improbable	____	____	____	____	____	____	____	probable

A HOPEFUL PERSON

How would you describe a hopeful person?

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
negative	____	____	____	____	____	____	____	positive
cold	____	____	____	____	____	____	____	warm
honest	____	____	____	____	____	____	____	dishonest
trusting	____	____	____	____	____	____	____	mistrusting
realistic	____	____	____	____	____	____	____	unrealistic
tender	____	____	____	____	____	____	____	tough
pessimistic	____	____	____	____	____	____	____	optimistic
confronting	____	____	____	____	____	____	____	withdrawing
accepting	____	____	____	____	____	____	____	rejecting
helpful	____	____	____	____	____	____	____	harmful
sad	____	____	____	____	____	____	____	happy
connected	____	____	____	____	____	____	____	disconnected
free	____	____	____	____	____	____	____	constrained
light	____	____	____	____	____	____	____	dark
unsure	____	____	____	____	____	____	____	confident
daring	____	____	____	____	____	____	____	cautious
active	____	____	____	____	____	____	____	passive
believable	____	____	____	____	____	____	____	unbelievable
following	____	____	____	____	____	____	____	leading
closing	____	____	____	____	____	____	____	opening
winning	____	____	____	____	____	____	____	losing
inhibiting	____	____	____	____	____	____	____	enhancing
heavy	____	____	____	____	____	____	____	light
good	____	____	____	____	____	____	____	bad
essential	____	____	____	____	____	____	____	frivolous
worthless	____	____	____	____	____	____	____	valuable

..../continued on next page

A HOPEFUL PERSON (continued)

How would you describe a hopeful person?

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
forward	____	: ____	: ____	: ____	: ____	: ____	: ____	backward
inward	____	: ____	: ____	: ____	: ____	: ____	: ____	outward
uncertain	____	: ____	: ____	: ____	: ____	: ____	: ____	certain
perfect	____	: ____	: ____	: ____	: ____	: ____	: ____	imperfect
near	____	: ____	: ____	: ____	: ____	: ____	: ____	far
expected	____	: ____	: ____	: ____	: ____	: ____	: ____	unexpected
hard	____	: ____	: ____	: ____	: ____	: ____	: ____	soft
desirable	____	: ____	: ____	: ____	: ____	: ____	: ____	undesirable
possible	____	: ____	: ____	: ____	: ____	: ____	: ____	impossible
dull	____	: ____	: ____	: ____	: ____	: ____	: ____	bright
imprecise	____	: ____	: ____	: ____	: ____	: ____	: ____	precise
fast	____	: ____	: ____	: ____	: ____	: ____	: ____	slow
fearless	____	: ____	: ____	: ____	: ____	: ____	: ____	fearful
weak	____	: ____	: ____	: ____	: ____	: ____	: ____	strong
broad	____	: ____	: ____	: ____	: ____	: ____	: ____	narrow
aware	____	: ____	: ____	: ____	: ____	: ____	: ____	unaware
uncaring	____	: ____	: ____	: ____	: ____	: ____	: ____	caring
stable	____	: ____	: ____	: ____	: ____	: ____	: ____	unstable
patient	____	: ____	: ____	: ____	: ____	: ____	: ____	impatient
empowering	____	: ____	: ____	: ____	: ____	: ____	: ____	disabling
meaningless	____	: ____	: ____	: ____	: ____	: ____	: ____	meaningful
joining	____	: ____	: ____	: ____	: ____	: ____	: ____	separating
colorful	____	: ____	: ____	: ____	: ____	: ____	: ____	colorless
improbable	____	: ____	: ____	: ____	: ____	: ____	: ____	probable

A PERSON WITHOUT HOPE

How would you describe a person without hope?

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
negative	___	: ___	: ___	: ___	: ___	: ___	: ___	positive
cold	___	: ___	: ___	: ___	: ___	: ___	: ___	warm
honest	___	: ___	: ___	: ___	: ___	: ___	: ___	dishonest
trusting	___	: ___	: ___	: ___	: ___	: ___	: ___	mistrusting
realistic	___	: ___	: ___	: ___	: ___	: ___	: ___	unrealistic
tender	___	: ___	: ___	: ___	: ___	: ___	: ___	tough
pessimistic	___	: ___	: ___	: ___	: ___	: ___	: ___	optimistic
confronting	___	: ___	: ___	: ___	: ___	: ___	: ___	withdrawing
accepting	___	: ___	: ___	: ___	: ___	: ___	: ___	rejecting
helpful	___	: ___	: ___	: ___	: ___	: ___	: ___	harmful
sad	___	: ___	: ___	: ___	: ___	: ___	: ___	happy
connected	___	: ___	: ___	: ___	: ___	: ___	: ___	disconnected
free	___	: ___	: ___	: ___	: ___	: ___	: ___	constrained
light	___	: ___	: ___	: ___	: ___	: ___	: ___	dark
unsure	___	: ___	: ___	: ___	: ___	: ___	: ___	confident
daring	___	: ___	: ___	: ___	: ___	: ___	: ___	cautious
active	___	: ___	: ___	: ___	: ___	: ___	: ___	passive
believable	___	: ___	: ___	: ___	: ___	: ___	: ___	unbelievable
following	___	: ___	: ___	: ___	: ___	: ___	: ___	leading
closing	___	: ___	: ___	: ___	: ___	: ___	: ___	opening
winning	___	: ___	: ___	: ___	: ___	: ___	: ___	losing
inhibiting	___	: ___	: ___	: ___	: ___	: ___	: ___	enhancing
heavy	___	: ___	: ___	: ___	: ___	: ___	: ___	light
good	___	: ___	: ___	: ___	: ___	: ___	: ___	bad
essential	___	: ___	: ___	: ___	: ___	: ___	: ___	frivolous
worthless	___	: ___	: ___	: ___	: ___	: ___	: ___	valuable

..../continued on next page

A PERSON WITHOUT HOPE (continued)

How would you describe a person without hope?

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
forward	____	: ____	: ____	: ____	: ____	: ____	: ____	backward
inward	____	: ____	: ____	: ____	: ____	: ____	: ____	outward
uncertain	____	: ____	: ____	: ____	: ____	: ____	: ____	certain
perfect	____	: ____	: ____	: ____	: ____	: ____	: ____	imperfect
near	____	: ____	: ____	: ____	: ____	: ____	: ____	far
expected	____	: ____	: ____	: ____	: ____	: ____	: ____	unexpected
hard	____	: ____	: ____	: ____	: ____	: ____	: ____	soft
desirable	____	: ____	: ____	: ____	: ____	: ____	: ____	undesirable
possible	____	: ____	: ____	: ____	: ____	: ____	: ____	impossible
dull	____	: ____	: ____	: ____	: ____	: ____	: ____	bright
imprecise	____	: ____	: ____	: ____	: ____	: ____	: ____	precise
fast	____	: ____	: ____	: ____	: ____	: ____	: ____	slow
fearless	____	: ____	: ____	: ____	: ____	: ____	: ____	fearful
weak	____	: ____	: ____	: ____	: ____	: ____	: ____	strong
broad	____	: ____	: ____	: ____	: ____	: ____	: ____	narrow
aware	____	: ____	: ____	: ____	: ____	: ____	: ____	unaware
uncaring	____	: ____	: ____	: ____	: ____	: ____	: ____	caring
stable	____	: ____	: ____	: ____	: ____	: ____	: ____	unstable
patient	____	: ____	: ____	: ____	: ____	: ____	: ____	impatient
empowering	____	: ____	: ____	: ____	: ____	: ____	: ____	disabling
meaningless	____	: ____	: ____	: ____	: ____	: ____	: ____	meaningful
joining	____	: ____	: ____	: ____	: ____	: ____	: ____	separating
colorful	____	: ____	: ____	: ____	: ____	: ____	: ____	colorless
improbable	____	: ____	: ____	: ____	: ____	: ____	: ____	probable

DAVE'S STORY

Dave was a successful businessman who really enjoyed his work. He had never been sick a day in his life and, at age 52, he was feeling very satisfied with his career.

One day, Dave noticed an unusual lump in his neck. He went to see his family doctor who referred him to a surgeon. Dave was immediately scheduled for surgery and was found to have a serious cancer. He was told by his surgeon that he had a relatively poor chance of surviving. The surgeon told Dave to book an appointment to see him in a "couple of weeks," so that they could talk about treatment options.

Shortly after coming back from the operating room, Dave was out of his room making himself some tea. Dave's nurse came looking for him and found him, stooped over the counter, stirring his tea. She said, "What are you doing here? You're supposed to be in bed."

Dave quickly replied, "I want that "chemo" [cancer medication]! You know what they do when they sew you up? They look at it and sew you up and send you back to die. I'm not ready to die! The surgeon told me to come back in two weeks. They'll be bringing me back in a box in two weeks. I want that "chemo" and I want it now!"

With further medical consultation, Dave was started on chemotherapy. Throughout his cancer treatments, Dave continued to work, despite not always feeling well. Both he and his wife were unwilling to accept the fact that he might die. He trusted his physicians and was very pleased with the care he received. He often spoke of his desire to see his grandchildren grow up and marry.

Five years after the initial diagnosis of cancer Dave is still alive.

If you read this story in a newspaper, what would be your reaction? Please mark your responses on the next page based on your personal reaction to the story. Your first impression is important.

DAVE'S STORY

If you read this story in a newspaper, what would be your reaction? Please mark your responses based on your personal reaction to the story. Your first impression is important.

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
negative	____	: ____	: ____	: ____	: ____	: ____	: ____	positive
cold	____	: ____	: ____	: ____	: ____	: ____	: ____	warm
honest	____	: ____	: ____	: ____	: ____	: ____	: ____	dishonest
trusting	____	: ____	: ____	: ____	: ____	: ____	: ____	mistrusting
realistic	____	: ____	: ____	: ____	: ____	: ____	: ____	unrealistic
tender	____	: ____	: ____	: ____	: ____	: ____	: ____	tough
pessimistic	____	: ____	: ____	: ____	: ____	: ____	: ____	optimistic
confronting	____	: ____	: ____	: ____	: ____	: ____	: ____	withdrawing
accepting	____	: ____	: ____	: ____	: ____	: ____	: ____	rejecting
helpful	____	: ____	: ____	: ____	: ____	: ____	: ____	harmful
sad	____	: ____	: ____	: ____	: ____	: ____	: ____	happy
connected	____	: ____	: ____	: ____	: ____	: ____	: ____	disconnected
free	____	: ____	: ____	: ____	: ____	: ____	: ____	constrained
light	____	: ____	: ____	: ____	: ____	: ____	: ____	dark
unsure	____	: ____	: ____	: ____	: ____	: ____	: ____	confident
daring	____	: ____	: ____	: ____	: ____	: ____	: ____	cautious
active	____	: ____	: ____	: ____	: ____	: ____	: ____	passive
believable	____	: ____	: ____	: ____	: ____	: ____	: ____	unbelievable
following	____	: ____	: ____	: ____	: ____	: ____	: ____	leading
closing	____	: ____	: ____	: ____	: ____	: ____	: ____	opening
winning	____	: ____	: ____	: ____	: ____	: ____	: ____	losing
inhibiting	____	: ____	: ____	: ____	: ____	: ____	: ____	enhancing
heavy	____	: ____	: ____	: ____	: ____	: ____	: ____	light
good	____	: ____	: ____	: ____	: ____	: ____	: ____	bad
essential	____	: ____	: ____	: ____	: ____	: ____	: ____	frivolous
worthless	____	: ____	: ____	: ____	: ____	: ____	: ____	valuable

..../continued on next page

DAVE'S STORY (continued)

If you read this story in a newspaper, what would be your reaction? Please mark your responses based on your personal reaction to the story. Your first impression is important.

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
forward	____	____	____	____	____	____	____	backward
inward	____	____	____	____	____	____	____	outward
uncertain	____	____	____	____	____	____	____	certain
perfect	____	____	____	____	____	____	____	imperfect
near	____	____	____	____	____	____	____	far
expected	____	____	____	____	____	____	____	unexpected
hard	____	____	____	____	____	____	____	soft
desirable	____	____	____	____	____	____	____	undesirable
possible	____	____	____	____	____	____	____	impossible
dull	____	____	____	____	____	____	____	bright
imprecise	____	____	____	____	____	____	____	precise
fast	____	____	____	____	____	____	____	slow
fearless	____	____	____	____	____	____	____	fearful
weak	____	____	____	____	____	____	____	strong
broad	____	____	____	____	____	____	____	narrow
aware	____	____	____	____	____	____	____	unaware
uncaring	____	____	____	____	____	____	____	caring
stable	____	____	____	____	____	____	____	unstable
patient	____	____	____	____	____	____	____	impatient
empowering	____	____	____	____	____	____	____	disabling
meaningless	____	____	____	____	____	____	____	meaningful
joining	____	____	____	____	____	____	____	separating
colorful	____	____	____	____	____	____	____	colorless
improbable	____	____	____	____	____	____	____	probable

KAREN'S STORY

Karen, a 42 year old woman with cancer, was in a hospital for control of her symptoms. She was receiving treatment for her pain, as her cancer was spreading. Although she was quite weak and needed help to get out of bed, she had a cheerful attitude and liked to joke with the nurses. Karen was looking forward to getting back some of her strength, as she eventually wanted to go back home to be with her husband and 15 year old son.

One day, Karen talked to her nurse about being in hospital.

> "The reason I'm in here, in hospital, is that I believe there's that, what would you say....rainbow out there. And if I take my medication, I do what I'm supposed to do....If I can go through the process of sitting, standing and walking....and get well, which I think I will, then fine. But if I've come in here with the idea that I'm going to die, then why am I here? I've come here with the idea of getting better which I intend to do. You just never give up that rainbow. If you give up that, then there's no point. You may as well stay home and take your pills or not take your pills at all."

The nursing staff were concerned that Karen was not aware of the seriousness of her illness and that she was dying. A nurse came in to talk to her about her "end-stage" disease.

Karen was very upset after the discussion with the nurse. She became quite depressed and did not feel like doing anything. She later told the nurse, "Do you realize that when you used the word, "end-stage," you took away all of my reason for living?"

Karen died two weeks later.

If you read this story in a newspaper, what would be your reaction? Please mark your responses on the next page based on your personal reaction to the story. Your first impression is important.

KAREN'S STORY

If you read this story in a newspaper, what would be your reaction? Please mark your responses based on your personal reaction to the story. Your first impression is important.

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
negative	____	____	____	____	____	____	____	positive
cold	____	____	____	____	____	____	____	warm
honest	____	____	____	____	____	____	____	dishonest
trusting	____	____	____	____	____	____	____	mistrusting
realistic	____	____	____	____	____	____	____	unrealistic
tender	____	____	____	____	____	____	____	tough
pessimistic	____	____	____	____	____	____	____	optimistic
confronting	____	____	____	____	____	____	____	withdrawing
accepting	____	____	____	____	____	____	____	rejecting
helpful	____	____	____	____	____	____	____	harmful
sad	____	____	____	____	____	____	____	happy
connected	____	____	____	____	____	____	____	disconnected
free	____	____	____	____	____	____	____	constrained
light	____	____	____	____	____	____	____	dark
unsure	____	____	____	____	____	____	____	confident
daring	____	____	____	____	____	____	____	cautious
active	____	____	____	____	____	____	____	passive
believable	____	____	____	____	____	____	____	unbelievable
following	____	____	____	____	____	____	____	leading
closing	____	____	____	____	____	____	____	opening
winning	____	____	____	____	____	____	____	losing
inhibiting	____	____	____	____	____	____	____	enhancing
heavy	____	____	____	____	____	____	____	light
good	____	____	____	____	____	____	____	bad
essential	____	____	____	____	____	____	____	frivolous
worthless	____	____	____	____	____	____	____	valuable

..../continued on next page

KAREN'S STORY (continued)

If you read this story in a newspaper, what would be your reaction? Please mark your responses based on your personal reaction to the story. Your first impression is important.

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
forward	____	: ____	: ____	: ____	: ____	: ____	: ____	backward
inward	____	: ____	: ____	: ____	: ____	: ____	: ____	outward
uncertain	____	: ____	: ____	: ____	: ____	: ____	: ____	certain
perfect	____	: ____	: ____	: ____	: ____	: ____	: ____	imperfect
near	____	: ____	: ____	: ____	: ____	: ____	: ____	far
expected	____	: ____	: ____	: ____	: ____	: ____	: ____	unexpected
hard	____	: ____	: ____	: ____	: ____	: ____	: ____	soft
desirable	____	: ____	: ____	: ____	: ____	: ____	: ____	undesirable
possible	____	: ____	: ____	: ____	: ____	: ____	: ____	impossible
dull	____	: ____	: ____	: ____	: ____	: ____	: ____	bright
imprecise	____	: ____	: ____	: ____	: ____	: ____	: ____	precise
fast	____	: ____	: ____	: ____	: ____	: ____	: ____	slow
fearless	____	: ____	: ____	: ____	: ____	: ____	: ____	fearful
weak	____	: ____	: ____	: ____	: ____	: ____	: ____	strong
broad	____	: ____	: ____	: ____	: ____	: ____	: ____	narrow
aware	____	: ____	: ____	: ____	: ____	: ____	: ____	unaware
uncaring	____	: ____	: ____	: ____	: ____	: ____	: ____	caring
stable	____	: ____	: ____	: ____	: ____	: ____	: ____	unstable
patient	____	: ____	: ____	: ____	: ____	: ____	: ____	impatient
empowering	____	: ____	: ____	: ____	: ____	: ____	: ____	disabling
meaningless	____	: ____	: ____	: ____	: ____	: ____	: ____	meaningful
joining	____	: ____	: ____	: ____	: ____	: ____	: ____	separating
colorful	____	: ____	: ____	: ____	: ____	: ____	: ____	colorless
improbable	____	: ____	: ____	: ____	: ____	: ____	: ____	probable

A PERSONAL STORY OF HOPE

Think of a time in your life when your own hope was very much challenged. This may be a personal experience or it may be an experience of another individual. Briefly describe this experience in the space provided.

How would you describe your hope relative to this experience?

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
negative	____	____	____	____	____	____	____	positive
cold	____	____	____	____	____	____	____	warm
honest	____	____	____	____	____	____	____	dishonest
trusting	____	____	____	____	____	____	____	mistrusting
realistic	____	____	____	____	____	____	____	unrealistic
tender	____	____	____	____	____	____	____	tough
pessimistic	____	____	____	____	____	____	____	optimistic
confronting	____	____	____	____	____	____	____	withdrawing
accepting	____	____	____	____	____	____	____	rejecting
helpful	____	____	____	____	____	____	____	harmful
sad	____	____	____	____	____	____	____	happy
connected	____	____	____	____	____	____	____	disconnected
free	____	____	____	____	____	____	____	constrained
light	____	____	____	____	____	____	____	dark
unsure	____	____	____	____	____	____	____	confident
daring	____	____	____	____	____	____	____	cautious
active	____	____	____	____	____	____	____	passive
believable	____	____	____	____	____	____	____	unbelievable
following	____	____	____	____	____	____	____	leading

..../continued on next page

A PERSONAL STORY OF HOPE (continued)

How would you describe your hope relative to this experience?

3 - extremely
2 - quite
1 - slightly
0 - equally or neither

	3	2	1	0	1	2	3	
closing	____	____	____	____	____	____	____	opening
winning	____	____	____	____	____	____	____	losing
inhibiting	____	____	____	____	____	____	____	enhancing
heavy	____	____	____	____	____	____	____	light
good	____	____	____	____	____	____	____	bad
essential	____	____	____	____	____	____	____	frivolous
worthless	____	____	____	____	____	____	____	valuable
forward	____	____	____	____	____	____	____	backward
inward	____	____	____	____	____	____	____	outward
uncertain	____	____	____	____	____	____	____	certain
perfect	____	____	____	____	____	____	____	imperfect
near	____	____	____	____	____	____	____	far
expected	____	____	____	____	____	____	____	unexpected
hard	____	____	____	____	____	____	____	soft
desirable	____	____	____	____	____	____	____	undesirable
possible	____	____	____	____	____	____	____	impossible
dull	____	____	____	____	____	____	____	bright
imprecise	____	____	____	____	____	____	____	precise
fast	____	____	____	____	____	____	____	slow
fearless	____	____	____	____	____	____	____	fearful
weak	____	____	____	____	____	____	____	strong
broad	____	____	____	____	____	____	____	narrow
aware	____	____	____	____	____	____	____	unaware
uncaring	____	____	____	____	____	____	____	caring
stable	____	____	____	____	____	____	____	unstable
patient	____	____	____	____	____	____	____	impatient
empowering	____	____	____	____	____	____	____	disabling
meaningless	____	____	____	____	____	____	____	meaningful
joining	____	____	____	____	____	____	____	separating
colorful	____	____	____	____	____	____	____	colorless
improbable	____	____	____	____	____	____	____	probable

APPENDIX D

Letters of Request for Participation

Edmonton Board of Health Nursing Staff
Request for Participation

Research Title: The Meaning of Hope: An Exploratory Study

Investigator: Cheryl Nekolaichuk, M.Ed., Doctoral Candidate
Department of Educational Psychology
6-102 Education North, University of Alberta
Edmonton, Ab. T6G 2G5

Dear Study Participant:

You are invited to participate in a study, which will be exploring the meaning of hope in health and illness. *Hope* is a commonly used word in every day life. In spite of its common usage, however, it is a difficult concept to define and understand. The purpose of this study is to gain a better understanding of the meaning of hope from a personal perspective. We are interested in finding out what hope means to you as an individual.

If you agree to participate in this study, you will be asked to complete a questionnaire about the meaning of hope. These questionnaires will be available at the Public Health Centres and the Home Care Offices of the Edmonton Board of Health. Your participation in this study is voluntary. You will be expected to complete this questionnaire outside work hours and you will not be paid for the time that it takes.

On this questionnaire, you will be asked to provide some background information about yourself and then to respond to a number of different hope-related statements and stories. You will be given an opportunity to share your personal and immediate impressions about hope by rating each hope statement or story against a set of scales beneath it. It should take about 45 minutes to complete this task. You can return the completed questionnaire to the investigator in the stamped, self-addressed envelope which will be provided to you.

It is important that you are comfortable with the questions that are being asked of you. You are free to leave out any question that you do not wish to answer. You are also free to withdraw from this study, at any time. If, for any reason, you do not want to complete or return this questionnaire, you are free to do so.

The information that you provide will be kept confidential. On the questionnaire, you will not be asked to give your name or any other information which would personally identify yourself. All information will be stored in the Department of Educational Psychology, University of Alberta, under lock and key. When the study is completed, the results may be presented for publication. However, you will not be identified by name or in any way associated with the study.

This study will increase our understanding of the meaning of hope, from an individual viewpoint. Clinically, this increased understanding will help health care professionals foster hope in patients through the development of hope-enhancing strategies. Although participation in this study may be of no personal benefit to you, it is hoped that, in the long-term, patient care can be improved.

You can contact me at 492-5245, if you have any further questions about this research. If you are interested in the study findings, you can contact me by mail at the address at the top of this page. I would like to take this opportunity to thank you for your interest in this study.

This research is being carried out under the supervision of Dr. R. F. Jevne and Dr. T. Maguire, Department of Educational Psychology, University of Alberta *02/94*

University of Alberta
Edmonton
Canada T6G 2G5

Department of Educational Psychology
Faculty of Education
6-102 Education North, Telephone (403) 492-5245
Fax (403) 492-1318

Alberta Association of Registered Nurses (AARN)
Letter of Request to Participate

March 30, 1994

Research Study: **The Meaning of Hope: An Exploratory Study**

Investigator: Cheryl Nekolaichuk, M.Ed., Doctoral Candidate
Department of Educational Psychology
University of Alberta, Edmonton

I am conducting a research study to explore the meaning of hope in health and illness. *Hope* is a commonly used word in every day life. In spite of its common usage, however, it is a difficult concept to define and understand.

To gain a better understanding of the meaning of hope, three different groups of people are being sampled: a healthy group, a patient group and a nursing group. Your name has been randomly selected to participate in this study as part of the nursing sample.

The nursing profession is constantly confronted with hope as you work on the "front lines" of patient care. Your expertise in working with patients on a daily basis and your challenges of maintaining hope offer a unique and valuable perspective.

You are invited to participate in this study and to share some of your personal views about hope. Your input into this study will be extremely valuable. If you are interested in participating in this study, you may complete the enclosed questionnaire.

Information from this study will help health care professionals better understand the meaning of hope for patients. This increased understanding may, in the long-term, contribute to improved patient care.

Thank you for supporting and contributing to this research endeavor.

Sincerely,

C Nekolaichuk

Cheryl Nekolaichuk, M.Ed.
Doctoral Candidate

This research is being carried out under the supervision of Dr. R. F. Jevne and Dr. T. Maguire, Department of Educational Psychology, University of Alberta

APPENDIX E

Consent Forms

ALBERTA
CANCER
BOARD

CROSS CANCER INSTITUTE
NORTHERN ALBERTA CANCER PROGRAM

The Meaning of Hope in Health and Illness: An Exploration of an Elusive Construct

(The Meaning of Hope: An Exploratory Study)

CONSENT FORM (for adult staff volunteers)

This consent form, a copy of which has been given to you, is only a part of the process of informed consent. It should give you the basic idea of what the research project is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

INTRODUCTION

The concept of *hope* is a commonly used term in every day life. In spite of its common usage, however, *hope* is a word which is difficult to define.

PURPOSE OF THE STUDY

The purpose of this study is to gain a better understanding of the meaning of hope from a personal perspective. We are interested in finding out what hope means to you as an individual.

TASKS

If you agree to participate in this study, you will be asked to complete a questionnaire about the meaning of hope. Your participation in this study is voluntary. You will be expected to complete this questionnaire outside work hours and you will not be paid for the time that it takes.

On this questionnaire, you will be asked to provide some background information about yourself and then to respond to a number of different hope-related statements and stories. You will be given an opportunity to share your personal and immediate impressions about hope by rating each hope statement or story against a set of scales beneath it. It should take

Subject's Initials _______
Date ________________
Page 1 of 3

about 45 minutes to complete this task. You can return the completed questionnaire to the investigator in the stamped, self-addressed envelope which will be provided to you.

It is important that you are comfortable with the questions that are being asked of you. You are free to leave out any question that you do not wish to answer. You are also free to withdraw from this study, at any time. If, for any reason, you do not want to complete or return this questionnaire, you are free to do so. If you are interested in the findings from this study, you can contact the investigator directly either by phone or mail.

POTENTIAL BENEFITS

Information from this study may help health care workers better understand what *hope* means to cancer patients. Participation in this study may be of no personal benefit to you. However, based on the results of this study, it is hoped that, in the long-term, patient care can be improved.

CONFIDENTIALITY

The information that you provide will be kept confidential. On the questionnaire, you will not be asked to give your name or any other information which would personally identify yourself. All information will be stored in the Department of Educational Psychology, University of Alberta, under lock and key. Any information identifying your participation in this study will be kept separate from the questionnaires. The information from these questionnaires will be reviewed by the investigator, her supervisors and a research assistant.

When the study is completed, the results may be presented for publication. However, you will not be identified by name or in any way associated with the study.

UNDERSTANDING OF PARTICIPANTS

My signature on this form indicates that I have understood to my satisfaction the information regarding my participation in the research project, and agree to participate as a subject. In no way does this waive my legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities.

I am free to withdraw from the study at any time without jeopardizing my employment. My continued participation will be as informed as my initial consent, so I am free to ask for clarification or new information throughout my participation.

I understand that Cheryl Nekolaichuk at 492-8703 or 492-8771 (CCI switchboard) will answer any questions that I have about the research project.

Subject's Initials _______
Date _________________
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If at any time during the course of this study I feel that I have been inadequately informed of the risks, benefits, or alternatives, or that I have been encouraged to continue in this study beyond my wish to do so, I can contact the Chairman of the Research Ethics Committee at (403) 482-9366.

A copy of this consent will be given to me to keep for my records and future reference.

Name of Subject	Signature of Subject
Name of Witness	Signature of Witness
Name of Investigator	Signature of Investigator

Date

ALBERTA
CANCER
BOARD

CROSS CANCER INSTITUTE
NORTHERN ALBERTA CANCER PROGRAM

The Meaning of Hope in Health and Illness: An Exploration of an Elusive Construct

(The Meaning of Hope: An Exploratory Study)

CONSENT FORM (for adult patients)

This consent form, a copy of which has been given to you, is only a part of the process of informed consent. It should give you the basic idea of what the research project is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Your physician has been contacted and has agreed that you be approached to participate in this study.

INTRODUCTION

The concept of *hope* is a commonly used term in every day life. In spite of its common usage, however, *hope* is a word which is difficult to define.

PURPOSE OF THE STUDY

The purpose of this study is to gain a better understanding of the meaning of *hope* from a personal perspective. We are interested in finding out what *hope* means to you as an individual.

TASKS

If you agree to participate in this study, you will be asked to complete a questionnaire about the meaning of hope. You may complete this questionnaire during your visit to the Cross Cancer Institute or, if it is more convenient, you may complete it at home.

On this questionnaire, you will be asked to provide some background information about yourself and then to respond to a number of different hope-related statements and stories. You will be given an opportunity to share your personal and immediate impressions about

Patient's Initials _______
Date ________________
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hope by rating each hope statement or story against a set of scales beneath it. It should take about 45 minutes to complete this task. You can return the completed questionnaire to the investigator in the stamped, self-addressed envelope which will be provided to you.

It is important that you are comfortable with the questions that are being asked of you. You are free to leave out any question that you do not wish to answer. You are also free to withdraw from this study, at any time. If, for any reason, you do not want to complete or return this questionnaire, you are free to do so. If you are interested in the findings from this study, you can contact the investigator directly either by phone or mail.

POTENTIAL BENEFITS

Information from this study may help health care workers better understand what *hope* means to cancer patients. Participation in this study may be of no personal benefit to you. However, based on the results of this study, it is hoped that, in the long-term, patient care can be improved.

CONFIDENTIALITY

The information that you provide will be kept confidential. On the questionnaire, you will not be asked to give your name or any other information which would personally identify yourself. All information will be stored in the Department of Educational Psychology, University of Alberta, under lock and key. Any information identifying your participation in this study will be kept separate from the questionnaires. The information from these questionnaires will be reviewed by the investigator, her supervisors and a research assistant. Your medical records at the Cross Cancer Institute may be reviewed by the investigator. However, strict confidentiality will be observed.

When the study is completed, the results may be presented for publication. However, you will not be identified by name or in any way associated with the study.

UNDERSTANDING OF PARTICIPANTS

My signature on this form indicates that I have understood to my satisfaction the information regarding my participation in the research project, and agree to participate as a subject. In no way does this waive my legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities.

I am free to withdraw from the study at any time without jeopardizing my health care. My continued participation will be as informed as my initial consent, so I am free to ask for clarification or new information throughout my participation.

I understand that Cheryl Nekolaichuk at 492-8703 or 492-8771 (CCI switchboard) will answer any questions that I have about the research project.

Patient's Initials _______
Date _______________
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If at any time during the course of this study I feel that I have been inadequately informed of the risks, benefits, or alternatives, or that I have been encouraged to continue in this study beyond my wish to do so, I can contact the Patient Advocate at (403) 492-8585.

A copy of this consent will be given to me to keep for my records and future reference.

Name of Patient	Signature of Patient
Name of Witness	Signature of Witness
Name of Investigator	Signature of Investigator
Date	

APPENDIX F

Response Rates and Sample Sources

Table F.1. Response Rates for the Total Sample (n=550) Based on Specific Sample Sources

Source	**Freq (Distrib)**	**Freq (Returns)**	**Response Rate (%)**
Community Service Agencies			
• The Hope Foundation of Alberta	285	91	31.9
• Edmonton Public Library	122	33	27.0
• Big Sisters of Edmonton	25	11	44.0
• Support Network	15	6	40.0
Subtotal	447	141	31.5
Professional Nursing Group			
• Alberta Association of Registered Nurses (AARN)	420	118	28.1
Educational Programs & Services			
• Program for Seniors, U of A	125	48	38.4
• SIDS Conference	60	18	30.2
• Palliative Care Conference, Calgary	27	6	22.2
• Edmonton Public School Board	25	12	48.0
• Alternatives to Wellness Conference	20	6	22.2
• Multicultural Health Conference	11	2	30.0
• EBH: New Strategies for Health	9	2	0.0
• Breast Cancer Forum	8	0	18.2
Subtotal	285	94	33.0
Health Organizations & Agencies			
• Cross Cancer Institute			
• Nursing Staff	37	7	18.9
• Breast Cancer Support Group	25	5	20.0
• GI Outpatient Clinic	21	10	47.6
• Pain and Symptom Clinic	2	1	50.0
• Edmonton Board of Health	77	32	41.6
• Ermineskin Physiotherapy Clinic	15	5	33.3
• Mental Health Therapist Interest Group	8	6	75.0
Subtotal	185	66	35.7
Schools of Nursing			
• University of Alberta, 4th year	73	21	28.8
• Royal Alexandra Hospital, 2nd year	38	24	63.2
Subtotal	111	45	40.5
Support Groups			
• Tough Love Parenting Group	35	15	42.9
• Parents of Mentally Handicapped Children	11	3	27.3
• CanSurmount	10	10	100.0
• Chronic Pain Support Group	5	2	40.0
Subtotal	61	30	49.2
Church Groups			
• Riverside Baptist Church, Devon	20	10	50.0
• St. Albert United Church	18	4	22.2
Subtotal	38	14	36.8
Athletic Group			
• Community League Volleyball Team	30	11	36.7
Other (individual contacts)	58	27	46.6
Missing (source of data)	—	4	—
TOTAL	1635	550	33.6

Table F.2. Sources of the Three Subsamples Based on Specific Groups

Source	Health	Illness	Nursing	Other	Total
Community Service Agencies					
• The Hope Foundation of Alberta	37	43	7	4	91
• Edmonton Public Library	16	15	0	2	33
• Big Sisters of Edmonton	5	4	0	2	11
• Support Network	3	0	0	3	6
Subtotal	61	62	7	11	141
Professional Nursing Groups					
• Alberta Association of Registered Nurses (AARN)	0	0	99	19	118
Educational Programs & Services					
• Program for Seniors, U of A	18	27	2	1	48
• SIDS Conference	9	7	2	0	18
• Palliative Care Conference, Calgary	1	4	0	1	6
• Edmonton Public School Board	9	3	0	0	12
• Alternatives to Wellness Conference	5	1	0	0	6
• Multicultural Health Conference	1	0	0	1	2
• EBH: New Strategies for Health	0	2	0	0	2
• Breast Cancer Forum	0	0	0	0	0
Subtotal	43	44	4	3	94
Health Organizations & Agencies					
• Cross Cancer Institute					
• Nursing Staff	0	0	6	1	7
• Breast Cancer Support Group	0	5	0	0	5
• GI Outpatient Clinic	0	10	0	0	10
• Pain and Symptom Clinic	0	1	0	0	1
• Edmonton Board of Health	0	0	32	0	32
• Ermineskin Physiotherapy Clinic	0	3	0	2	5
• Mental Health Therapist Interest Group	0	0	5	1	6
Subtotal	0	19	43	4	66
Schools of Nursing					
• University of Alberta, 4th year	0	0	21	0	21
• Royal Alexandra Hospital, 2nd year	0	0	24	0	24
Subtotal	0	0	45	0	45
Support Groups					
• Tough Love Parenting Group	7	7	1	0	15
• Parents of Mentally Handicapped Children	1	1	1	0	3
• CanSurmount	2	6	2	0	10
• Chronic Pain Support Group	0	2	0	0	2
Subtotal	10	16	4	0	30
Church Groups					
• Riverside Baptist Church, Devon	6	4	0	0	10
• St. Albert United Church	2	1	1	0	4
Subtotal	8	5	1	0	14
Athletic Group					
• Community League Volleyball Team	7	4	0	0	11
Other (individual contacts)	15	8	3	1	27
Missing (unknown source of data)	2	1	0	1	4
TOTAL	146	159	206	39	550

APPENDIX G

Factor Structures for the Hope-Related Concepts

The complete factor structures for the six hope-related concepts are presented in Tables G.1 through G.7, Appendix G. The original factor structure for *Hope*, based on 50 variables, and the refined factor structure for *Hope*, based on 24 variables, appear in Tables G.1 and G.2, respectively. The factors structures, based on 24 variables, for the remaining concepts, specifically, *A Hopeful Person, Dave's Story, A Personal Story of Hope, Karen's Story* and *A Person without Hope,* appear in Tables G.3 through G.7, respectively. For ease of interpretation, each adjective pair scale is represented by the adjective at the positive end of the continuum, which best reflects the *Hope* concept. Thus, for some variables, the signs on the factor loadings have been reversed. For consistency, the factor structures for the two concepts which represent a loss of hope, specifically, *Karen's Story* and *A Person without Hope,* are also presented at the positive end of the adjective continuum.

Table G.1. Orthogonally Rotated Factor Loadings for the Concept, *Hope* (50 variables, n=550)

VARIABLES+	LOADINGS		
	Factor I	Factor II	Factor III
meaningful	.70	.16	.05
empowering	.70	.15	.05
valuable	.69	.09	.16
desirable	.67	.11	.18
enhancing	.66	.14	.20
essential	.65	.06	.13
bright	.63	.27	.19
opening	.62	.12	.22
forward	.59	.33	.18
good	.59	.14	.30
strong	.58	.43	.01
caring	.56	.23	.14
helpful	.55	.07	.35
possible	.53	.30	.22
active	.52	.22	.17
winning	.52	.25	.19
light (dark)	.51	.10	.43
aware	.49	.48	.12
colorful	.49	.28	.22
positive	.48	-.01	.25
joining	.47	.37	.20
free	.44	.27	.34
broad	.44	.28	.02
believable	.43	.31	.40
probable	.42	.34	.29
daring	.41	.10	-.01
light (heavy)	.40	.26	.30
optimistic	.39	-.06	.25
leading	.34	.30	.05
confronting	.32	.28	.19
precise	.10	.66	.12
near	.21	.65	.11
perfect	.21	.63	.21
certain	.33	.63	.22
stable	.37	.58	.13
expected	.08	.57	.14
fearless	.30	.56	.08
fast	-.09	.55	.06
confident	.43	.45	.29
patient	.30	.35	.13
outward	.00	.23	.11
honest	.09	.13	.73
trusting	.21	.11	.68
realistic	.23	.27	.63
tender	.03	.13	.60
happy	.35	.29	.47
connected	.34	.27	.45
warm	.37	-.02	.43
accepting	.12	.34	.43
soft	.06	.11	.26
% of total variance	30.8	4.9	3.9
% of common variance	77.8	12.4	9.8

+ Some of the adjective pair scales were randomly reversed in polarity for the Hope Research Study, but for convenience of comparison the signs have been changed to make them consistent.

Table G.2

Orthogonally Rotated Factor Loadings of the Refined Factor Structure for the Concept, *Hope* (24 variables, n=550)

	LOADINGS[a]		
VARIABLES[a]	Factor I	Factor II	Factor III
meaningful	.78	.08	.12
empowering	.73	.11	.11
desirable	.73	.07	.16
valuable*	.72	.03	.21
bright	.69	.21	.21
caring	.68	.12	.17
strong*	.65	.35	.10
forward+	.64	.24	.21
precise	.11	.70	.13
near+	.20	.64	.16
expected	.03	.63	.12
fast*	-.05	.62	-.01
certain+	.34	.61	.27
fearless+	.39	.53	.10
stable	.46	.48	.17
confident	.40	.47	.33
honest*	.03	.08	.82
trusting	.14	.04	.79
realistic+	.16	.23	.72
tender	.11	.09	.53
warm*	.27	.01	.49
happy+	.32	.35	.45
connected+	.27	.29	.44
accepting	.18	.31	.39
Total Variance(%)	33.4	8.4	7.4
Common Variance(%)	67.9	17.1	15.0

[a] Some of the adjective pair scales were randomly reversed in polarity for the Hope Research Study, but for convenience of comparison the signs have been changed to make them consistent.

*Adjective pair markers for Osgood et al.'s (1957) three factors.

+Adjective pair markers for Dufault and Martocchio's (1985) model of hope.

Table G.3

Orthogonally Rotated Factor Loadings for the Concept, *A Hopeful Person,* Based on the Factor Structure for *Hope* (24 variables, n=550)

VARIABLES[a]	LOADINGS[a]		
	Factor I	Factor II	Factor III
valuable (1)	.78	.08	.15
meaningful (1)	.76	.17	.16
desirable (1)	.70	.15	.18
empowering (1)	.66	.13	.14
strong (1)	.66	.44	-.01
caring (1)	.66	.12	.35
bright (1)	.65	.35	.21
stable (2)	.62	.40	.22
forward (1)	.59	.33	.16
confident (2)	.58	.54	-.10
honest (3)	.56	.19	.53
connected (3)	.54	.44	.19
precise (2)	.22	.68	.25
fast (2)	.12	.64	.13
certain (2)	.48	.64	.03
fearless (2)	.38	.57	-.02
expected (2)	-.12	.56	.35
near (2)	.15	.53	.34
happy (3)	.45	.49	.10
realistic (3)	.36	.43	.38
tender (3)	.02	.09	.70
trusting (3)	.38	.17	.54
warm (3)	.51	.04	.54
accepting (3)	.17	.31	.53
Total Variance(%)	40.7	6.6	5.9
Common Variance(%)	76.5	12.4	11.1

Note. Variable markers in bold print represent the predicted factor loadings for the *Hope* concept. Numbers in parentheses after the variables represent the three sets of factor markers for *Hope,* that is, 1=Factor I or *personal spirit* markers, 2=Factor II or *risk* markers and 3=Factor III or *authentic caring* markers.

[a] Some of the adjective pair scales were randomly reversed in polarity for the Hope Research Study, but for convenience of comparison the signs have been changed to make them consistent.

Table G.4

Orthogonally Rotated Factor Loadings for the Concept, *Dave's Story (A Story of Hope)*,

Based on the Factor Structure for *Hope* (24 variables, n=550)

	LOADINGS[a]		
VARIABLES[a]	Factor I	Factor II	Factor III
meaningful (1)	.77	.18	.12
valuable (1)	.73	.21	.08
strong (1)	.72	.33	-.03
empowering (1)	.72	.19	.06
bright (1)	.71	.28	.21
desirable (1)	.70	.09	.24
happy (3)	.69	-.11	.23
confident (2)	.66	.34	.16
forward (1)	.64	.44	.06
caring (1)	.62	.17	.26
stable (2)	.59	.48	.13
warm (3)	.59	.11	.42
connected (3)	.55	.34	.26
certain (2)	.54	.48	.17
fast (2)	.13	.77	-.09
precise (2)	.16	.74	.16
near (2)	.19	.44	.29
fearless (2)	.42	.44	.05
honest (3)	.34	.40	.36
accepting (3)	-.04	.05	.75
tender (3)	.11	-.23	.72
trusting (3)	.33	.20	.59
realistic (3)	.27	.37	.55
expected (2)	.17	.28	.47
Total Variance(%)	39.4	7.8	6.1
Common Variance(%)	73.9	14.6	11.5

Note. Variable markers in bold print represent the predicted factor loadings for the *Hope* concept. Numbers in parentheses after the variables represent the three sets of factor markers for *Hope*, that is, 1=Factor I or *personal spirit* markers, 2=Factor II or *risk* markers and 3=Factor III or *authentic caring* markers.

[a] Some of the adjective pair scales were randomly reversed in polarity for the Hope Research Study, but for convenience of comparison the signs have been changed to make them consistent.

Table G.5

Orthogonally Rotated Factor Loadings for the Concept, *A Personal Story of Hope*, Based on the Factor Structure for *Hope* (24 variables, n=550)

VARIABLES[a]	LOADINGS[a]		
	Factor I	Factor II	Factor III
valuable (1)	.84	.17	.23
meaningful (1)	.82	.20	.23
desirable (1)	.78	.19	.27
forward (1)	.76	.29	.31
empowering (1)	.75	.26	.29
bright (1)	.71	.43	.35
strong (1)	.65	.48	.25
stable (2)	.64	.35	.38
caring (1)	.62	.17	.38
certain (2)	.55	.48	.38
happy (3)	.52	.40	.33
confident (2)	.51	.45	.42
fast (2)	.09	.78	.07
fearless (2)	.37	.66	.20
precise (2)	.29	.62	.28
near (2)	.42	.43	.39
accepting (3)	.29	.11	.75
tender (3)	.02	.24	.65
trusting (3)	.47	.24	.64
realistic (3)	.28	.06	.58
warm (3)	.56	.31	.56
connected (3)	.54	.32	.55
honest (3)	.40	.11	.53
expected (2)	.25	.25	.45
Total Variance(%)	53.7	4.5	4.7
Common Variance(%)	85.4	7.1	7.5

Note. Variable markers in bold print represent the predicted factor loadings for the *Hope* concept. Numbers in parentheses after the variables represent the three sets of factor markers for *Hope*, that is, 1=Factor I or *personal spirit* markers, 2=Factor II or *risk* markers and 3=Factor III or *authentic caring* markers.

[a] Some of the adjective pair scales were randomly reversed in polarity for the Hope Research Study, but for convenience of comparison the signs have been changed to make them consistent.

Table G.6

Orthogonally Rotated Factor Loadings for the Concept, *Karen's Story (A Story of Losing Hope)*, Based on the Factor Structure for *Hope* (24 variables, n=550)

VARIABLES[a]	LOADINGS[a]		
	Factor I	Factor II	Factor III
warm (3)	.75	.16	-.02
desirable (1)	.65	.31	-.06
tender (3)	.64	.14	.00
trusting (3)	.63	.00	.35
caring (1)	.60	.22	.12
empowering (1)	.57	.48	.07
forward (1)	.54	.43	.16
accepting (3)	.52	.15	.22
happy (3)	.52	.26	-.27
connected (3)	.42	.40	.20
strong (1)	.25	.69	.13
confident (2)	.21	.67	-.04
certain (2)	.07	.64	.22
stable (2)	.30	.64	.11
fearless (2)	.31	.56	-.06
near (2)	.20	.55	.26
bright (1)	.47	.48	.09
meaningful (1)	.33	.46	.30
valuable (1)	.37	.41	.27
realistic (3)	.12	.02	.75
honest (3)	.36	-.07	.70
expected (2)	.02	.26	.57
precise (2)	-.04	.43	.53
fast (2)	-.14	.28	.36
Total Variance(%)	31.5	8.4	6.3
Common Variance(%)	68.2	18.2	13.6

Note. Variable markers in bold print represent the predicted factor loadings for the *Hope* concept. Numbers in parentheses after the variables represent the three sets of factor markers for *Hope*, that is, 1=Factor I or *personal spirit* markers, 2=Factor II or *risk* markers and 3=Factor III or *authentic caring* markers.

[a] Some of the adjective pair scales were randomly reversed in polarity for the Hope Research Study, but for convenience of comparison the signs have been changed to make them consistent.

Table G.7

Orthogonally Rotated Factor Loadings for the Concept, *A Person without Hope*,

Based on the Factor Structure for *Hope* (24 variables, n=550)

VARIABLES^a	LOADINGS^a		
	Factor I	Factor II	Factor III
fearless (2)	.75	.07	.06
happy (3)	.66	-.03	.16
empowering (1)	.66	.04	.34
connected (3)	.64	.22	.22
confident (2)	.63	.36	.18
strong (1)	.60	.41	.22
stable (2)	.55	.39	.35
desirable (1)	.52	-.06	.50
fast (2)	.50	.31	.02
bright (1)	.49	.19	.48
meaningful (1)	.49	.20	.41
accepting (3)	.44	.26	.36
near (2)	.39	.25	.27
expected (2)	.04	.75	.09
precise (2)	.23	.72	.07
realistic (3)	.13	.54	.36
certain (2)	.47	.53	.07
tender (3)	.00	.04	.73
caring (1)	.31	.23	.63
trusting (3)	.30	.02	.63
honest (3)	.02	.45	.61
warm (3)	.18	.06	.61
valuable (1)	.22	.28	.55
forward (1)	.36	.35	.47
Total Variance(%)	36.5	6.3	6.7
Common Variance(%)	73.7	12.7	13.6

Note. Variable markers in bold print represent the predicted factor loadings for the *Hope* concept. Numbers in parentheses after the variables represent the three sets of factor markers for *Hope*, that is, 1=Factor I or *personal spirit* markers, 2=Factor II or *risk* markers and 3=Factor III or *authentic caring* markers.

[a] Some of the adjective pair scales were randomly reversed in polarity for the Hope Research Study, but for convenience of comparison the signs have been changed to make them consistent.

APPENDIX H

Factor Means for the Health, Illness and Nursing Subsamples

Concepts		**Subsamples**		
		Health (n=146)	Illness (n=159)	Nursing (n=206)
Hope	PS	1.74	1.71	1.67
	R	3.04	2.91	3.07
	AC	2.13	2.12	2.10
Hopeful Person	PS	1.86	1.79	1.75
	R	2.75	2.72	2.67
	AC	1.98	2.06	2.00
Person without Hope	PS	5.21	5.19	5.04
	R	5.20	5.18	5.08
	AC	5.42	5.24	5.28
Dave's Story	PS	1.93	1.99	2.01
	R	2.76	2.76	2.95
	AC	2.68	2.75	2.67
Karen's Story	PS	5.11	4.89	4.97
	R	4.65	4.60	4.55
	AC	4.64	4.61	4.65
Personal Story	PS	2.98	2.82	3.14
	R	3.93	3.76	4.14
	AC	3.31	3.40	3.65

Key: FACTORS

PS	personal spirit
R	risk
AC	authentic caring

APPENDIX I

Factor Mean Comparisons of Demographic Variables

Table I.1

Levels and Frequencies of Within-Group Factor Mean Comparisons for the *Demographic Variables* (Total Sample, n=550)

Variable	Level	Freq
Age (n=523)	18-30	117
	31-40	129
	41-50	144
	51-60	71
	61-84	62
Employment (n=395)	full-time or part-time	358
	unemployed[a]	37
Gender (n=545)	male	84
	female	461

[a] Does not include unemployed students.

Table I.2

Factor Means for the Six Hope-Related Concepts Based on the Demographic Variable, *Age* (Total Sample, n=550)

Concepts		**Age**				
		18-30	**31-40**	**41-50**	**51-60**	**61+**
Hope	PS	1.86	1.74	1.67	1.58	1.62
	R	3.26	3.15	2.99	2.93	2.60
	AC	2.20	2.25	2.09	2.02	1.96
Hopeful Person	PS	1.85	1.83	1.80	1.82	1.69
	R	2.90	2.75	2.71	2.56	2.50
	AC	2.09	2.09	2.06	1.99	1.81
Person without Hope	PS	5.10	5.18	5.11	5.07	5.09
	R	5.12	5.17	5.09	5.24	5.06
	AC	5.33	5.36	5.25	5.26	5.18
Dave's Story	PS	2.15	1.97	1.97	1.86	1.88
	R	3.22	2.83	2.85	2.50	2.51
	AC	2.91	2.60	2.74	2.65	2.49
Karen's Story	PS	4.89	5.13	5.00	4.94	4.72
	R	4.52	4.68	4.60	4.54	4.38
	AC	4.51	4.77	4.63	4.55	4.55
Personal Story	PS	3.18	3.15	3.04	2.77	2.60
	R	4.12	4.09	3.97	3.82	3.58
	AC	3.63	3.60	3.42	3.39	3.14

Key: FACTORS

PS	personal spirit
R	risk
AC	authentic caring

Table I.3

Factor Means for the Six Hope-Related Concepts Based on the Demographic Variables, *Employment* and *Gender* (Total Sample, n=550)

Variables

Concepts		**Employment**		**Gender**	
		employed	unemployed	male	female
Hope	PS	1.70	2.06	1.89	1.69
	R	3.06	3.13	3.11	3.02
	AC	2.11	2.35	2.25	2.11
Hopeful Person	PS	1.78	2.10	2.07	1.77
	R	2.69	2.85	2.92	2.68
	AC	2.01	2.24	2.19	2.00
Person without Hope	PS	5.12	5.08	5.22	5.10
	R	5.16	5.09	5.19	5.12
	AC	5.33	5.19	5.31	5.28
Dave's Story	PS	2.00	1.88	2.31	1.92
	R	2.90	2.42	3.01	2.80
	AC	2.71	2.69	2.94	2.64
Karen's Story	PS	5.01	4.69	4.91	4.97
	R	4.63	4.45	4.46	4.60
	AC	4.63	4.34	4.50	4.63
Personal Story	PS	3.03	3.19	3.02	2.98
	R	4.03	3.80	3.81	3.97
	AC	3.51	3.33	3.27	3.49

Key: FACTORS

PS	personal spirit
R	risk
AC	authentic caring

APPENDIX J

Factor Mean Comparisons of Stress Variables

Table J.1

Levels and Frequencies of Within-Group Factor Mean Comparisons for the *Stress* Variables (Total Sample, n=550)

Variable	Level	Freq
Stress, abuse (n=301)*	abuse[a] stress-free[b]	23 278
Stress, accidents (n=358)*	accidents[c] stress-free	80 278
Stress, assault (n=299)*	assault[d] stress-free	21 278
Stress, finances (n=290)*	finances stress-free	12 278
Stress, family health (n=319)*	family health[e] stress-free	41 278
Stress, personal health (n=347)*	personal health[f] stress-free	69 278
Stress, loss (n=331)*	loss[g] stress-free	53 278
Stress, relationships (n=330)*	relationships[h] stress-free	52 278

*Note. Number in parentheses is total of stress variable frequency plus stress-free group frequency.

[a] Includes physical, emotional and/or sexual abuse, as reported by the individual.

[b] Includes those individuals who had not experienced a stressful, possibly life-threatening event, which was not necessarily illness-related.

[c] Includes motor vehicle accidents, falls, sporting accidents and natural disasters.

[d] Includes both physical and sexual assault.

[e] Includes illnesses, injuries, accidents and/or disabilities of family members.

[f] Includes personal physical and/or mental health issues, such as physical injuries, allergic reactions, food poisoning and suicide attempts.

[g] Includes the death of a child, spouse, family member or significant other. Some individuals experienced a single loss, while others experienced multiple losses.

[h] Includes family turbulence, marital difficulties, separation and/or divorce. Some individuals experienced a single relationships stressor, while others experienced multiple relationship stressors.

Table J.2

Factor Means for the Six Hope-Related Concepts Based on the *Stress* Variables

(Total Sample, n=550)

Concepts		**Stress Variables**								
		finance	family health	assault	rel	loss	abuse	own health	accid	stress free
Hope	PS	1.82	1.63	2.08	1.92	1.67	1.90	1.75	1.80	1.73
	R	3.06	2.87	3.47	3.14	3.04	3.20	2.92	3.19	3.01
	AC	2.07	1.98	2.28	2.25	2.09	2.42	2.16	2.11	2.13
Hopeful Person	PS	2.00	1.62	1.76	1.77	1.67	1.83	1.63	1.82	1.86
	R	2.68	2.41	2.63	2.58	2.53	2.79	2.61	2.76	2.74
	AC	2.08	1.75	1.91	2.08	1.91	2.25	2.00	2.05	2.06
Person without Hope	PS	5.36	5.08	5.01	5.13	4.91	4.81	5.39	5.05	5.13
	R	5.49	5.10	5.24	5.16	5.02	5.05	5.28	5.03	5.10
	AC	5.65	5.26	5.34	5.29	5.34	4.94	5.43	5.18	5.33
Dave's Story	PS	2.16	1.89	2.14	2.04	1.81	1.92	1.98	2.03	2.04
	R	2.92	2.61	2.89	2.70	2.54	2.53	2.80	2.94	2.93
	AC	3.05	2.42	2.93	2.74	2.36	2.58	2.79	2.72	2.73
Karen's Story	PS	5.06	4.78	4.99	4.95	5.25	5.14	5.25	5.02	4.93
	R	4.97	4.59	4.75	4.68	4.76	4.64	4.66	4.55	4.55
	AC	4.81	4.71	4.62	4.61	4.83	4.73	4.68	4.60	4.60
Personal Story	PS	4.08	2.80	3.33	3.39	3.15	2.90	3.23	2.84	2.98
	R	4.85	3.79	4.15	4.35	4.18	3.87	4.10	3.77	3.93
	AC	4.34	3.15	3.97	4.01	3.46	3.44	3.73	3.37	3.40

Key:

VARIABLES

finance	financial stress
rel	relationship stress
own health	personal health
accid	accidents

FACTORS

PS	personal spirit
R	risk
AC	authentic caring

APPENDIX K

Factor Mean Comparisons of Health Status

Table K.1

Levels and Frequencies of Factor Mean Comparisons for the Variable *Health Status* Based on the Health Subsample, the Illness Subsample and the Total Sample

Variable	Level	Freq
Health Status	excellent	56
[Health Subsample]	very good	70
(n=146)	good	20
Health Status	excellent	18
[Illness Subsample]	very good	50
(n=158)	good	50
	fair	31
	poor	9
Health Status	excellent	137
[Total Sample]	very good	236
(n=541)	good	116
	fair	42
	poor	10

Table K.2

Factor Means for the Six Hope-Related Concepts Based on *Health Status* (Health Subsample, n=146)

Concepts		**Health Status**		
		excellent	very good	good
Hope	PS	1.67	1.71	2.03
	R	2.87	3.12	3.24
	AC	1.96	2.14	2.57
Hopeful Person	PS	1.78	1.90	1.95
	R	2.74	2.72	2.85
	AC	1.97	1.94	2.13
Person without Hope	PS	5.29	5.16	5.16
	R	5.20	5.19	5.22
	AC	5.54	5.34	5.38
Dave's Story	PS	2.03	1.77	2.16
	R	2.83	2.67	2.87
	AC	2.76	2.55	2.92
Karen's Story	PS	5.11	5.29	4.54
	R	4.68	4.72	4.32
	AC	4.68	4.73	4.22
Personal Story	PS	2.88	2.85	3.77
	R	3.81	3.85	4.68
	AC	3.22	3.14	4.20

Key: FACTORS

PS	personal spirit
R	risk
AC	authentic caring

Table K.3

Factor Means for the Six Hope-Related Concepts Based on *Health Status*

(Illness Subsample, n=159)

Concepts		**Health Status**				
		excellent	very good	good	fair	poor
Hope	PS	1.45	1.62	1.87	1.73	1.61
	R	2.94	2.81	3.08	2.74	2.90
	AC	1.66	2.07	2.37	2.05	2.17
Hopeful Person	PS	1.76	1.74	1.97	1.65	1.63
	R	2.60	2.68	2.91	2.55	2.65
	AC	1.82	2.05	2.21	1.91	2.11
Person without Hope	PS	4.97	5.23	5.16	5.36	4.97
	R	5.01	5.32	5.01	5.37	5.21
	AC	5.22	5.26	5.14	5.43	5.21
Dave's Story	PS	1.73	1.89	2.19	1.96	1.90
	R	2.73	2.63	2.83	2.83	2.81
	AC	2.55	2.64	2.83	2.77	3.07
Karen's Story	PS	4.89	4.93	4.73	5.03	5.08
	R	4.41	4.73	4.53	4.59	4.69
	AC	4.35	4.57	4.63	4.76	4.78
Personal Story	PS	2.07	2.77	2.93	3.09	3.03
	R	3.33	3.71	3.64	4.06	4.38
	AC	2.73	3.17	3.62	3.64	3.94

Key: FACTORS
PS personal spirit
R risk
AC authentic caring

Table K.4

Factor Means for the Six Hope-Related Concepts Based on *Health Status*

(Total Sample, n=550)

Concepts		**Health Status**				
		excellent	very good	good	fair	poor
Hope	PS	1.69	1.67	1.83	1.74	1.83
	R	2.99	3.03	3.16	2.75	3.10
	AC	2.01	2.11	2.31	2.05	2.29
Hopeful Person	PS	1.77	1.79	1.96	1.72	1.60
	R	2.67	2.69	2.87	2.56	2.68
	AC	2.00	2.00	2.17	1.88	2.13
Person without Hope	PS	5.12	5.09	5.06	5.40	5.14
	R	5.11	5.16	4.98	5.40	5.30
	AC	5.40	5.26	5.13	5.52	5.39
Dave's Story	PS	1.89	1.92	2.17	2.05	1.91
	R	2.78	2.77	3.01	2.83	2.81
	AC	2.67	2.63	2.79	2.65	2.99
Karen's Story	PS	4.99	5.03	4.76	4.95	5.26
	R	4.60	4.62	4.47	4.46	4.85
	AC	4.62	4.65	4.54	4.54	4.84
Personal Story	PS	2.93	2.90	3.15	3.10	3.29
	R	3.88	3.87	4.10	3.96	4.54
	AC	3.43	3.27	3.75	3.60	4.17

Key: FACTORS

PS	personal spirit
R	risk
AC	authentic caring

APPENDIX L

Factor Mean Comparisons of Illness Variables

Table L.1

Levels and Frequencies of the Within-Group Factor Mean Comparisons for the *Illness* Variables Based on the Illness Subsample (n=159)

Variable	Level	Freq
Type of Illness (n=159)	serious(SI)	42
	life-threatening(LI)	22
	chronic(CI)	45
	two illness types[a]	29
	three illness types[b]	21
Cancer Experience (n=159)	Illness, noncancer	120
	Illness, cancer	39
Onset of Illness (n=159)	adulthood	148
	childhood	11

[a] Refers to two types of illness experience: serious and life-threatening; serious and chronic; or life-threatening and chronic.

[b] Refers to three types of illness experience: serious, life-threatening and chronic.

Table L.2

Factor Means for the Six Hope-Related Concepts Based on *Type of Illness*

(Illness Subsample, n=159)

Concepts		**Type of Illness**				
		serious	life-threatening	chronic	two types[a]	three types[b]
Hope	PS	1.71	1.58	1.68	1.64	1.99
	R	2.94	2.44	3.01	2.99	3.04
	AC	2.25	1.88	2.22	2.09	1.94
Hopeful Person	PS	1.79	1.69	1.83	1.86	1.73
	R	2.77	2.34	2.74	2.81	2.87
	AC	2.09	1.97	2.16	2.00	1.93
Person without Hope	PS	5.19	5.06	5.35	5.24	4.90
	R	5.02	5.32	5.30	5.35	4.80
	AC	5.25	5.36	5.29	5.29	4.87
Dave's Story	PS	2.02	1.96	2.06	1.82	2.03
	R	2.83	2.63	2.77	2.70	2.84
	AC	2.43	2.82	3.03	2.75	2.69
Karen's Story	PS	4.74	4.82	5.02	4.95	4.91
	R	4.58	4.52	4.69	4.53	4.64
	AC	4.53	4.55	4.54	4.88	4.66
Personal Story	PS	2.78	2.34	3.10	3.30	2.06
	R	3.71	3.29	4.05	4.09	3.20
	AC	3.47	2.63	3.65	3.90	2.77

[a] Refers to two types of illness experience: serious and life-threatening; serious and chronic; or life-threatening and chronic.

[b] Refers to three types of illness experience: serious, life-threatening and chronic.

Key: FACTORS

PS	personal spirit
R	risk
AC	authentic caring

Table L.3

Factor Means for the Six Hope-Related Concepts Based on the Illness Variables, *Cancer Experience* and *Onset of Illness* (Illness Subsample, n=159)

Illness Variables

Concepts		Cancer Experience		Onset of Illness	
		cancer	noncancer	childhood	adulthood
Hope	PS	1.49	1.78	1.63	1.71
	R	2.63	3.01	2.92	2.91
	AC	2.05	2.14	1.98	2.13
Hopeful Person	PS	1.67	1.83	1.89	1.79
	R	2.48	2.81	2.84	2.71
	AC	2.01	2.07	2.06	2.06
Person without Hope	PS	5.20	5.18	5.11	5.19
	R	5.21	5.17	5.30	5.17
	AC	5.22	5.24	5.40	5.23
Dave's Story	PS	1.86	2.03	1.97	1.99
	R	2.56	2.83	3.03	2.74
	AC	2.58	2.80	2.39	2.77
Karen's Story	PS	4.89	4.89	4.84	4.90
	R	4.55	4.62	4.30	4.63
	AC	4.70	4.58	4.32	4.64
Personal Story	PS	2.19	3.04	2.21	2.87
	R	3.40	3.88	3.36	3.79
	AC	3.11	3.50	2.65	3.47

Key: FACTORS

PS	personal spirit
R	risk
AC	authentic caring

APPENDIX M

Factor Mean Comparisons of Nursing Variables

Table M.1

Levels and Frequencies of Within-Group Factor Mean Comparisons for the *Nursing* Variables Based on the Nursing Subsample (n=206)

Variable	Level	Freq
Illness Experience (n=204)	Nurses, healthy[a]	124
	Nurses, illness experience	80
Nursing Experience (n=206)	Nurses, general duty	137
	Nurses, student	50
	Nurses, managers	19

[a] Refers to nurses who had no illness experience and who rated their level of health within good to excellent range.

Table M.2

Factor Means for the Six Hope-Related Concepts Based on the Nursing Variables.

Nursing Experience and *Illness Experience* (Nursing Subsample, n=206)

Concepts		**Nursing Experience**			**Illness Experience**	
		student nurses	general duty nurses	nurse managers	illness experience	healthy
Hope	PS	1.61	1.68	1.75	1.69	1.66
	R	3.20	3.04	2.95	3.12	3.04
	AC	2.04	2.12	2.19	2.13	2.08
Hopeful Person	PS	1.77	1.74	1.80	1.78	1.73
	R	2.86	2.60	2.64	2.68	2.66
	AC	2.07	1.95	2.17	2.04	1.98
Person without Hope	PS	5.01	5.04	5.15	4.92	5.13
	R	5.09	5.08	5.14	5.03	5.14
	AC	5.15	5.31	5.43	5.18	5.35
Dave's Story	PS	2.29	1.95	1.68	2.13	1.95
	R	3.36	2.86	2.47	2.96	2.93
	AC	2.96	2.60	2.41	2.68	2.67
Karen's Story	PS	5.09	4.86	5.46	4.90	5.01
	R	4.53	4.49	5.09	4.50	4.59
	AC	4.69	4.62	4.79	4.57	4.70
Personal Story	PS	3.31	3.15	2.75	3.09	3.18
	R	4.23	4.15	3.92	4.18	4.12
	AC	3.67	3.61	3.85	3.75	3.58

Key: FACTORS

PS	personal spirit
R	risk
AC	authentic caring

APPENDIX N

Summary of the Factor Mean Comparisons

Table N.1

Main Effects of the Factor Mean Comparisons for the *Demographic* and *Stress* Variables (Total Sample, n=550)

Variables

Concepts		Demographics			Stress								
		age	em	gen		fin	FH	aslt	rel	los	abs	PH	A
Hope	PS		*					*					
	R	*						*					
	AC												
Hopeful Person	PS		*	*									
	R	*					*						
	AC						*						
Person without Hope	PS										*		
	R					*							
	AC					*					*		
Dave's Story	PS			*									
	R	*	*				*			*	*		
	AC	*		*		*	*			*			
Karen's Story	PS	*	*							*		*	
	R	*				*							
	AC												
Personal Story	PS	*				*		*	*				
	R	*				*			*				
	AC	*				*		*	*			*	
No. of sig difference		9	4	3		7	4	4	3	3	3	2	0

*Effect size of .60 or greater

Key:

FACTORS

PS	personal spirit
R	risk
AC	authentic caring

DEMOGRAPHIC VARIABLES

age	age
em	employment
gen	gender

STRESS VARIABLES

fin	finances
FH	family health
aslt	physical or sexual assault
rel	relationships
los	loss
abs	abuse
PH	personal health
A	accidents

Table N.2

Main Effects of the Factor Mean Comparisons for the *Health, Illness* and *Nursing* Variables (Total Sample, n=550)

Variables

Concept		Health Status				Illness				Nursing	
		Ill	Tot	Hlt		ill typ	ill ons	CA exp		RN exp	ill exp
Hope	PS	*		*		*					
	R	*	*	*		*		*			
	AC	*	*	*		*					
Hopeful Person	PS	*	*								
	R	*	*			*		*			
	AC	*									
Person without Hope	PS	*	*			*					
	R	*	*			*					
	AC		*			*					
Dave's Story	PS	*		*						*	
	R									*	
	AC	*	*	*		*	*			*	
Karen's Story	PS	*	*	*						*	
	R	*	*	*			*			*	
	AC	*	*	*		*	*				
Personal Story	PS	*	*	*		*	*	*		*	
	R	*	*	*		*	*	*		*	
	AC	*	*	*		*	*	*		*	
No. of sig difference		16	14	11		12	6	5		8	0

*Effect size of .60 or greater

Key.

FACTORS

PS	personal spirit
R	risk
AC	authentic caring

HEALTH VARIABLES

Ill	illness subsample
Tot	total sample
H	health subsample

ILLNESS VARIABLES

ill typ	type of illness
ill ons	onset of illness
CA exp	cancer experience

NURSING VARIABLES

RN exp	nursing experience
ill exp	illness experience

Table N.3

A Summary of the Relevant Significant Differences for the Concept, *A Personal Story of Hope*, Based on Health and Illness Variables

Variable	**Levels of Comparison**	**Significant Differences**
Age	• over 60 vs. 18 to 40	• all three factors
	• over 50 vs. 18 to 30	• personal spirit & authentic caring
Stress	• financial stresses vs. stress-free group	• all three factors
	• relationship stresses vs. stress-free group	• all three factors
	• assault vs. stress-free group	• personal spirit & authentic caring
Health Status	**Illness Subsample**	
	• excellent vs. good to poor health	• all three factors
	• very good vs. fair health	• all three factors
	• very good to fair vs. poor health	• risk & authentic caring
	Health Subsample	
	• very good to excellent vs. good health	• all three factors
	Illness vs. Health Subsample	
	• good health	• all three factors
	• excellent health	• all three factors
Type of Illness	• life-threatening vs. serious	• all three factors
	• life-threatening vs. chronic	• all three factors
	• serious vs. chronic	• personal spirit & risk
Onset of Illness	• childhood vs. adulthood	• all three factors
Cancer Experience	• cancer experience vs. non-cancer illness experience	• all three factors
Nursing Experience	• nurse managers vs. students	• personal spirit & risk
	• nurse managers vs. staff nurses	• personal spirit

Table N.4

A Summary of the Relevant Significant Differences for the Concept, *Dave's Story*, Based on Health and Illness Variables

Variable	**Levels of Comparison**	**Significant Differences**
Age	• over 60 vs. 18 to 30 • over 50 vs. 18 to 30	• risk & authentic caring • risk
Gender	• women vs. men	• personal spirit & authentic caring
Stress	• family health vs. stress-free • loss vs. stress-free	• risk & authentic caring • risk & authentic caring
Health Status	**Health Subsample** • very good vs. good health	• personal spirit & authentic caring
Nursing Experience	• nurse managers & staff nurses vs. students • nurse managers vs. staff nurses	• all three factors • risk

Table N.5

A Summary of the Relevant Significant Differences for the Concept, *Karen's Story*, Based on Health and Illness Variables

Variable	Levels of Comparison	Significant Differences
Age	• 31 to 40 vs. over 60	• personal spirit & risk
Health Status	**Total Sample** • poor vs. fair to good health	 • all three factors
	Health Subsample • very good vs. good health • excellent vs. good health	 • all three factors • all three factors
Onset of Illness	• adulthood vs. childhood	• risk & authentic caring
Nursing Experience	• nurse managers vs. students and staff nurses	• personal spirit & authentic caring